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By JOHN R. SPEARS

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STORY OF THE AMERICAN MERCHANT
MARINE





Captain Nathaniel Brown Palmer. Born August 8, 1799. Died June 21, 1877.

Captain Nathaniel Brown Palmer

An Old-Time Sailor of the Sea

BY

JOHN R. SPEARS

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PREFACE

While employed as a reporter on *The Sun*, of New York, thirty odd years ago, the writer saw in the January, 1884, issue of *Harper's Magazine*, an illustrated account of "The Old Packet and Clipper Service." Records of swift passages, hero tales and statements of vast profits were mingled in it in a way that proved memorable. In fact, the whole story was so interesting that the magazine was preserved and became the first item in a collection of books relating to the sea.

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Naturally this collection came to resemble the original article in that the most important feature was bibliographical; it came to demonstrate that a history of the sea, at least, is a series of biographies. Naturally, too, the records of some of the more active of the old master mariners were duplicated, more or less, in the various accounts—their work had attracted the attention of more than one writer. Accordingly, as the collection was read and reread, the names of certain captains became more and more familiar to the reader and then a time came when the name of one old captain came to mind whenever any true story of the sea was read.

A few quotations from some of the sketches will

show how this came to pass: In the original account it was noted that when ships were named, during the clipper era, "the custom was to use the names of distinguished merchants or captains—the Houqua. the Samuel Russell, the N. B. Palmer." A copy of the North American Review, published in 1834, told how a Yankee sailor, in a sloop "but little rising forty tons," had discovered lands of continental proportions near the Antarctic Pole and had explored the coast for many miles in spite of the hurricane squalls that prevail in that region and in spite of the ice floes which mill around and crash together there under the influence of currents as well as winds. The name of this young man was Nathaniel Brown Palmer, and the story quoted said that a Russian naval officer had named the coast thus explored Palmer Land. It appeared that the young explorer thus distinguished was the distinguished merchant or captain for whom a ship had been named later.

A clipping from a Liverpool newspaper described briefly a race between twelve American packets and freighters plying between New York and Liverpool. The winner in this race was the Washington, Captain Holdredge. He arrived in seventeen days. The third in the race was the Columbus, Captain Palmer, who arrived a day later. The Nautical Magazine, (Volume II), which was edited by John Willis Griffiths, a noted naval architect, made mention of Captain N. B. Palmer several times during 1855, and on one occasion coupled his name with that of

William H. Aspinwall, saying that the two were the originators of "the late clipper era."

The impression made by these references was deepened by further reading. There were many notable men in the service of the American merchant marine during the period between the War of 1812 and the Civil War, but, as the records indicated, Captain Palmer as an explorer, as a master mariner, and, more important still, as a designer of famous clippers, was preeminent. So a time came when the writer decided to secure, if possible, the facts at least sufficient for a biographical sketch, and if possible for a fairly complete biography.

It is a pleasure to acknowledge that in the work then begun the most cordial aid was received from Mrs. Richard Fanning Loper, of Stonington, Connecticut, a niece of Captain Palmer. The captain had lived with Captain Alexander Palmer, her father, for several years and such of his papers as remained were left in Mrs. Loper's possession. The old Palmer mansion at Stonington—a picturesque, shingle-covered structure that stood on the west side of town at a point overlooking the Sound and the sea—was burned on November 15, 1850, when many documents such as log books and letters were destroyed, but some, including the log of the little sloop Hero, kept during the memorable voyage to the Antarctic Continent, were saved. All the materials in Mrs. Loper's possession, together with notes made from memory by her father, by herself and others

have all been used in preparing this biography. But for the unwearied aid of Mrs. Loper it could not have been written.

As for the facts obtained from contemporary periodicals and documents, credit is given where quotations are made. It should also be said, however, that many statements relating to the clippers which were designed by Captain Palmer, as well as by others, are taken from the "The Clipper Ship Era," by Captain Arthur H. Clark, a work which gives a history of all the clippers, including the British, which attracted public attention during the period. Captain Clark is "one of the last of the captains of the old school," to quote a biographical sketch in "Some Merchants and Sea Captains of Old Boston." He wrote his history in part from personal knowledge but chiefly from authentic documents, such as the log books of the ships, which he gathered during the many years when he was the New York representative of Lloyd's Register of Shipping.

The writer must also acknowledge that material help was received from Dr. James H. Weeks, of Stonington; Frederick William Edgerton, of the Public Library, New London; H. M. Lydenberg, of the New York Public Library; the librarian of the Boston Public Library; Captain W. C. Asserson, U. S. N., Acting Hydrographer, Washington; Homer Sheridan, managing editor, of the *Marine Journal*, New York; Kenneth Lord, city editor of

the New York Herald; A. J. Aubrey, of the Brooklyn Eagle; S. Davies, Secretary of Lloyd's Register of Shipping; J. Murray Forbes, Milton, Mass., and Allan Forbes, of the State Street Trust Co., Boston.

J. R. S.

Little Falls, N. Y., September 14, 1921.



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CAPTAIN NATHANIEL BROWN PALMER

An Old-Time Sailor of the Sea



Captain Nathaniel Brown Palmer

CHAPTER I

TRAINED IN A SHIPYARD

aptain Nathaniel Brown Palmer was born in the old family home at Stonington on August 8, 1799. He was one among eight children—four boys and four girls. On his father's side he was descended from Walter Palmer who settled at Salem, Mass., in 1629, while his mother was of the Brown family of Rhode Island. His father, who also bore the name of Nathaniel Brown Palmer, was educated to practice law, but he preferred to hear the rasp of the pit saw and the crisp chip of the adz, rather than the dull drone of the court room, and so he made shipbuilding his life work.

Because building ships was the work of the father, young Nat, as the boy born in 1799 was called to distinguish him from his father, had a shipyard for a playground from the time he was old enough to run around without the care of a nurse. Stonington, in those days, was a thriving seaport of about

5,000 inhabitants, standing at the mouth of Long Island Sound. When storms prevailed to eastward the coasters bound around Point Judith and so on to Providence or Boston or Portland, were in the habit of entering the harbor of Stonington to await pleasant weather. Then vessels that met misfortune when rounding Point Judith or Block Island, tound the Palmer shipyard a convenient place for making repairs. The coasters brought many a tidy repair job to the Palmer shipyard.

In the matter of building new ships, the yard was favored by the fact that Connecticut oak stood higher in the estimation of ship owners than any except the live oak of Hatteras Island and the coast of Florida. Of course the final test of popularity of the yard depended on the quality of the work done, and the proof that the quality was of the highest is found in the fact that many vessels of all classes were built there. However, because the channel leading into the harbor carried only twelve feet of water the chief demand at the Palmer yard was for brigs, schooners, and sloops.

As said, from the time that young Nat was able to navigate the sea of chips he went to his father's yard to play; and so he began to absorb a knowledge of hulls and spars before he went to school to learn his letters. He stood by while the workmen stretched keels on the blocks and erected the ribs; and he listened to what they said about the models of the hulls thus begun. He looked on with unfailing interest while other workmen, with endless chipping, shaped long logs of various diameters into masts and yards and booms and gaffs, discussing, the while, the merits of the sticks they worked upon and the general dimensions of spars when compared with the sizes and shapes of the hulls for which they were designed. He learned what was meant when they said a vessel was over-sparred before he learned to work the rule of three.

His admiration was excited early by the men who could rest one end of a slender stick on a rock and then with a keen-edged ax slice shaving after shaving down to within an inch of the rock until he made of the stick a treenail, that was either round or eight-square, and of the exact diameter to drive into its destined augur hole—all this without ever a slip that would endanger the edge on the ax. And then there was the man who could swing an ax in an overhead blow and split a chalk line three times in succession. Young Nat dreamed of the day when he, too, should be able to do that as well as any one.

The shipbuilders of that day—the carpenters, the spar makers, the riggers, and so on—were proud of their skill. There was a friendly rivalry between them in the yard, each striving to outdo the others, not through any craven fear of the "old man," as the owner was called, but for the love of the distinguished consideration which skill brought to men who excelled. So the shipyard was more than a

playground for the towsle-headed youngster; it was a good school of the kindergarten variety. It was one of many which then gave character to the small, growing and somewhat towsle-brained nation.

When a vessel was launched, and the people of the borough and the country round about came to cheer her on her way, young Nat was one of the privileged few who mounted the deck to ride down the ways. The click of the mauls as the iron wedges were driven into the keelblocks; the settling of the hull on the cradle as the blocks dropped to pieces; the final blow that released the trigger and let the hull slide down the ways, all thrilled the boy more than the men and women who cheered the event most cordially.

Even that was not all. For while the hull was yet on the ways the workmen and other spectators talked about the poise the hull should have after going afloat. Hulls were designed wholly by rule o' thumb, in those days, and sometimes a ship was down by the bows when the designer had expected her to be down by the stern. And sometimes a hull showed a list to one side or the other. The boy listened while the workmen as well as the unhappy designer told just how such a hull happened to go wrong.

Most important in the education of young Nat were these shippard experiences; for they created or at any rate cultivated the bent of mind which eventually led him to design the ships of the Dramatic Line of Liverpool packets and the stately clippers *Howqua*, *Samuel Russell*, *Oriental*, and others which were most efficient and most famous in the China trade.

That this boy learned to swim about as soon as he learned to walk was according to the custom of alongshore New England boys. One old account says that when a gang of youngsters went to the swimming hole, it frequently happened that boys who had not yet learned to swim jumped in, determined to learn how, then and there—or get saved by some of the older ones present. Of course, too, the boy learned to handle a sailboat at the age when farm boys learned to ride a horse. For the boys of Stonington, a sail to the Middle Ground was a matter of no moment; but to reach away to Ram Island or the eastern end of Fisher's Island was an adventure, while sailing to New London or to Gardiner's Island was a voyage.

Consider now the influence of the stories told by the sailors from the vessels which came to the Palmer yard for repairs. Those were the good old days of Jeffersonian simplicity when the American people preferred paying tribute to the pirates of the north coast of Africa to fighting for freedom to sail their ships across the high seas—when they paid millions of tribute in the shape of coin, armed ships and naval stores to black pirates. No doubt seamen who had been in the Mediterranean came to Stonington and related their experiences on the

African coast. Many—perhaps most—of them had been in the West Indies during the days when French and Spanish piratical privateers were raiding American commerce, and these had tales of narrow escapes and of prison experiences to tell. Of the stories of shipwreck there was, of course, no end. The very presence of the vessels seeking repairs was usually due to some sort of disaster. In short, the common conversation of Stonington related to the sea just as people in the blue grass of Kentucky talk about the pedigrees of horses.

More important still, perhaps, in shaping the early career of this young sailor-in-the-making, were the oft-told stories of the neighbors who had sailed with Captain Edmund Fanning in the brig Betsey, when, in 1797-1799, she went to the Falklands for fur seals; rounded the Horn and stopped at Mas-a-fuera off the coast of Chili for more, and then sailed on to Canton with 100,000 skins. That was a wonderfully profitable voyage for all hands on the ship, and they had sailed around the world. Moreover some of them remained on Mas-a-fuera to take skins for the Betsey for another voyage to follow the first. No sailors from Stonington had more exciting adventure tales to tell than these had.

From the sunlit waters of the Caribbean to the ice fields of the far south, from New York around Cape Horn to Canton and China, the sailors of Stonington had seen many a strange sight of which they were ready to talk to the wondering boys at

home. So the winds that came unimpeded from beyond the Cape of Good Hope to the Palmer shipyard at Stonington called with a siren's voice to

young Nat as he played among the chips.

Of the political conditions prevailing in the nation during his boyhood young Nat no doubt knew much. When an embargo was laid on American shipping in an effort to compel the warring nations of Europe to deal justly with this country, the vigor with which the people of the town denounced the absurd measure was certainly in part understood by the boy of ten—perhaps fully understood. He appreciated the effects of the measure beyond a doubt when he saw the dismantling of ships in the harbor. And when on June 18, 1812, war was declared, he was old enough to share in the excitement that prevailed all alongshore.

That the interest of the boy in that war increased with the passage of time is also beyond doubt, for

Stonington occupied a notable position.

The borough stood on a point of land, called Long Point, opposite the east end of Fisher's Island, and therefore faced the open sea as well as the east end of Long Island Sound. The anchorage of that day was a roadstead rather than a harbor and in later years breakwaters were built to shelter the shipping of the port. Nevertheless it was frequently used by the coasting vessels as already noted—especially during northeast storms. When the War of 1812 came on it was popular for another reason. It

became a resort for blockade runners. For the enemy sent a war squadron under Commodore Sir Thomas M. Hardy (he had been the favorite captain of Admiral Nelson), to blockade the east end of Long Island Sound. These ships reached to and fro between Montauk Point and Point Judith where they were nearly always within view of Stonington.

In foul weather the crews of the squadron were especially vigilant but they were never able to stop the coasting traffic of the Yankees. Indeed the blockade did but give zest to the traffic, for the danger added greatly to the profits of each successful passage. Thus at New York where the grain of the Hudson watershed could be obtained, the price of flour was but \$7 a barrel. At Boston, where the people had been accustomed to depend on New York for their supplies, the price quickly rose to \$14. Captain Jacob Dunham, in his reminiscences, tells how he bought the sloop Rover for \$500, loaded her with 500 barrels of flour which he carried through the blockade to eastern ports and sold for \$4,000 net profit. Some one ought to write a book on "Profits and Progress," for it can be easily demonstrated that high profits create swift progress.

The profits in blockade running were a perpetual call to the daring seamen of the coast, and nowhere was the call louder than at Stonington. For the usual route of the coaster was through Fisher's Island Sound and so within easy reach of the Stonington anchorage. When fog and wind favored her

the coaster held her way; when clearing weather seemed coming on, or when daylight was at hand, the coaster dropped anchor near the borough. Captain Dunham says that blockade runners could be seen at anchor there at all times when the weather was fair. The people—more especially the boys of Stonington—had the daring crews of these vessels always in mind.

Moreover they saw the coasters when in deadly peril. Many a time the fog cleared away unexpectedly while a sloop or a schooner was passing Point Judith or was under Watch Hill, and the nearest warship of the enemy came in hot pursuit. Every sail was spread on pursuer and pursued and then the guns on the warship began to roar. Many an interesting yacht race has been seen from Stonington, but consider how the excitement grew as the Pactolus frigate, or the sloop Despatch, fired shot that knocked the spray over the rail of the hunted coaster and even carried away the tophamper. And when the crew of the coaster were seen at work wetting down their sails to increase her speed we may well believe that the spectators fairly shrieked their approval.

Sometimes the flying Yankee held her way in spite of injuries and came fluttering into port like a wounded wild fowl. Sometimes the crew of a captured coaster rose on the prize crew and retook her as was the luck of the crew of the Natina, Captain Stewart.

The boys of Stonington knew the coasters as well as a landsman knows the houses of his home town. They were personally acquainted with many members of the crews. Indeed, there were Stonington men and boys on many of the blockade runners. When one of these little vessels dropped anchor off the point it was the custom for some of the crew to come ashore, where they told in the picturesque language of the sea how they had managed to escape the enemy—told the story to listeners who became wellnigh breathless because of their intense interest.

But war was to come still closer to the people of Stonington. The borough had been bombarded, though all in vain, during the War of the Revolution. On August 9, 1814, Commodore Hardy came to bombard it again because he had heard that the Stoningtonians were building torpedoes with which to attack his squadron. As the story is told in H. D. Palmer's "Stonington by the Sea," the 74-gun liner Ramilies, the 44-gun frigate Pactolus, the 22-gun brig Despatch and the bomb brig Terror reached in to anchor at a point where their guns would bear. Then a boat brought ashore a message which read:

"Not wishing to destroy the unoffending inhabitants of Stonington, one hour is given them from the receipt of this to remove out of town."

The non-combatants left the town; the men loaded two old-fashioned 18-pounders, which were standing in a small earthwork on the point. They had at hand a 4-pounder but it was not loaded then.

They had two guns with which to reply to four ships which together mounted 140 effective cannon besides an unknown number of mortars on the *Terror*, some of the shells from which weighed more than 200 pounds. In the history of war there are few stories of men who faced greater odds than that.

At 8 o'clock that night the Terror began shelling the town. The crews of the two 18-pounders—sailors, no doubt, who had faced the perils of the sea ever since the previous war—returned the fire. And at the first shot they fired they demonstrated that the odds were in their favor! For their shot struck home. They knew how to aim their guns while the enemy fired with enthusiasm and nothing better to direct their shells.

Seeing that his fire was ineffective while that of the two 18-pounders were sinking the Terror, Commodore Hardy at 9 o'clock, sent six or seven huge rowboats to a position from which they could shower the town with Congreve rockets, a weapon then supposed to be especially efficient in firing wooden houses. A few houses were thus set on fire but the Stoningtonians extinguished the flames. The fire of shot which was meantime directed on the two 18-pounders eventually cut the old "gridiron flag" from its staff in the little earthwork, but a big gunner stepped to the flagstaff where another man, flag in hand, mounted his shoulders and nailed it to the staff.

At midnight Commodore Hardy acknowledged

that he had failed thus far—acknowledged it by sending a flotilla of longboats to effect a landing. Thereupon the Stoningtonians brought their 4-pounder as well as one of the 18-pounders to bear on these boats.

"We tore one of their barges all to pieces," wrote Captain Amos Palmer, in a letter to the Secretary of the Navy, later, "so that two, one on each side, had to lash her up to keep her from sinking."

At that the flotilla fled, which was something British sailors have rarely done. Then the fire at the warships was renewed. The bombardment was continued, off and on, for three days. In that time the sloop *Despatch* alone lost 21 killed and 50 wounded from the fire of the two 18-pounders, as was learned from one of her officers after the war. The loss on the other warships was never told. In Stonington one man was hurt—mortally wounded. Not a house was destroyed. The people picked up fifteen tons of projectiles after the battle ended. Some of them are yet on view. So is the tattered old flag which floated above the two 18-pounders.

It was among such neighbors as these men who would fight regardless of the odds that young Nat Palmer was born and reared. Moreover it was the proud boast of the people there that one of them—Midshipman Nathaniel Fanning—had fought under John Paul Jones on the Bon Homme Richard and had heard the memorable words "I have not yet

begun to fight." In no town in the world was a higher standard of manhood maintained.

But whether young Nat was at home when the borough was bombarded is doubtful for he had, earlier in the year, shipped as a boy before the mast in one of the blockade runners which plied to and fro from New York to Portland, regardless of the blockade.

CHAPTER II

A CAPTAIN AT EIGHTEEN

of young Nat Palmer as a sailor on a blockade runner, during the War of 1812, is the statement that one vessel on which he was employed was burned in the harbor at New Haven. But some of the conditions under which he made his way through the blockading squadrons, from time to time, are well known, and may be described here in order to show the kind of life he led and its effects upon his development as a sailor of the sail.

First of all it may be noted that there was not a lighthouse in commission anywhere along shore. The buoys which had been placed here and there to mark the reefs and shoals had all been removed at the opening of the war, lest they serve to guide the enemy. Sailing along the American coast was like sailing on some newly-discovered littoral, save only as the captain of each American vessel knew the lay of the land, and could locate dangerous water by distant marks such as hills and houses, which were visible in clear weather.

In making a passage, as from New York to Boston, the vessel usually had clear sailing until within

sight of the blockading squadron, say, off New London. It was therefore the custom, when the air was clear, to sail along boldly on this passage as far as that port or to Huntington, Long Island, and then anchor to wait for fog or a dark night. With a fog during a night when the moon was not shining the captain of a blockade runner felt entirely safe; for all the captains in the business were like the pilot on the Mississippi of whom Mark Twain told—they knew the waters through which they were to steer as well as they knew the lay of the rooms in their own homes. A cast of the lead was the only aid to trained instinct needed when making the run.

The skill of the crews who handled these vessels is memorable; for it was something marvelous in the eyes of foreigners. Consider the sloops that were commonly used. Some of them were from 50 to 75 feet long. The masts were much taller than the hulls were long and some booms were five feet longer than the hulls. A 75-foot sloop commonly had a mast 84 or 85 feet tall with a boom that was 80 feet long. The mainsail was comparable with that of a "giant" defender of the America's cup, but a crew of six men handled any one of those sloops, where the cup racers have carried from thirty to forty. And one man at the tiller could gibe the main boom over in a smart breeze without bringing enough strain on sheet or masthead to break a ropeyarn.

The young apprentice from Stonington was

trained to handle the tiller by men who could do just that well; and in due course he became as expert as they were. In fair winds and foul; in gentle airs and in roaring gales, he had to stand his trick at the tiller, noting the while not only the influence of the wind but the influence of tidal currents, which were sometimes favorable and sometimes adverse. More important still, considering the work he was to do later, he had to do all this at night and when the fog was so thick on the water that he could not see the jib when he stood at the tiller.

It was said of the blockade-running skippers that they could "smell their way from Hell Gate to Providence with their eyes shut"; and that was not as much of an exaggeration as it may seem to modern navigators of Long Island Sound.

Throughout the War of 1812 and until 1818 young Nat sailed upon vessels which were engaged in trade between New York and the New England ports. He thus learned the arts of the coasting trade so well that he was promoted first to the rank of second mate and then mate. Before he was 19 he became master of a schooner named Galena. He had maintained the reputation of his home port, for Stoningtonians made boast of the ability of their boys to secure command before they were of an age to vote.

The peculiar skill which young Nat had acquired while working his way aft—the ability to navigate among the shoals in foul weather as well as fair—

was now to take him from the coasting trade to a voyage on deep water and yet demote him; for he was invited to take part as a second mate in an expedition, fitted out at private expense, to explore the unknown waters below Cape Horn. The object in view was the location of islands supposed to exist there, which were known to tradition as the Auroras, and these islands were supposed to be the summer home of vast herds of fur seals.

Because young Nat joined in this expedition and thus became a noted sealer, a brief review of the seal fishery will give a needed focus upon that period of his life. According to a history issued by the U. S. Fish Commission "a Boston lady named Haley * was led to bear the expense of fitting out the ship *States* for a voyage to the Falkland Islands for hair seal skins and sea elephant oil," soon after the War of the Revolution.

Skins of the hair seal were then used raw to cover trunks. They were also tanned for various uses. Sea elephant oil sold for as much as that of the right whale. The *States* returned to New York with a full cargo of hair seal skins and of elephant oil, together with 13,000 skins of the fur seal, which, says the record, were brought "as an experiment."

An "experiment" was characteristic of the American sailors of the day. They would try any kind of work that promised a large profit. This ex-

^{*}Sister of John Wilkes, a member of Parliament, who became a popular hero after publishing a pamphlet attacking George III (1763).

periment had a far-reaching effect. When the furs arrived in New York nobody knew what to do with them, but they were sold for 50 cents each to a buyer who supposed that at worst they might be tanned as were those of the hair seal. Then a venturesome merchant bought them and shipped them to Calcutta. He "guessed" they were the skins of sea otters, instead of seals, and he had heard that sea otter skins sold for more than \$20 each in Canton. He shipped the skins to Calcutta instead of Canton because he "guessed" one Asiatic port would prove as desirable as another, and because he found a ship ready for that port while none was ready for Canton. He learned in time that no one in Calcutta would buy them, but they were then shipped to Canton where they brought \$5 each or \$65,000 for the consignment.

The development of the fur-seal fishery followed that speculation. Among the venturesome merchants of New York, in those days, was Elias Nexsen. He fitted out the brig Betsey for a sealing voyage in 1792. The mate of the brig was a Stonington boy named Edmund Fanning who, about forty years later, wrote a book entitled "Voyages Around the World," in which he described the adventures of the Betsey's crew while at the Falkland Islands. The skins taken by the Betsey were carried to New York, but another vessel, the Eliza, Captain William R. Stewart, which took 38,000 skins at Juan Fernandez, carried them to Canton,

where they were sold for only 50 cents each. The Chinese market had been depressed by the number of skins.

In 1797 Mr. Nexsen fitted out the Betsev for another sealing voyage with Captain Edmund Fanning in command. The Betsey called at the Falklands and Mas-a-fuera and then carried 100,000 skins to Canton. Fanning's book does not tell the price received for the skins, nor the gross return from the China goods he secured in exchange for them, but it says that the net profit of the owners of the Betsey amounted to \$52,300. The Betsey measured less than 100 tons and was probably worth less than \$3,000. At about this time the ship Neptune, Captain Daniel Green, of New Haven, gathered 45,000 skins at the Falklands and Juan Fernandez, which sold for \$90,000 in Canton. The China goods then purchased sold for \$260,000 in New York and the profits were so large that the lay of the forecastle hands amounted to \$1,200 each.

Thereafter voyages to the fur-seal islands were made every year, among which only one, that of Captain Edmund Fanning, in a well-armed ship named Aspasia, need be considered here. The captain sailed in 1800 to the South Georgia islands where he secured 57,000 prime furs which he sold in Canton at great profit.

Another sealer who made money was Captain Amasa Delano, who wrote a book, describing his adventures, which was issued in 1817 and had a

wide circulation. Meantime, vessels from nearly all the American whaling ports had tried the seal fishery. The result was practical extermination of the known herds. It was said that 3,000,000 seals were taken from Juan Fernandez alone. The scarcity of seals on the known rookeries, as the seal beaches were, and are, called, caused the failure of several ventures in the fishery and it was then that the exploring expedition in search of the Auroras was planned.

The prime mover in this expedition was Captain Edmund Fanning, who had retired from the sea. He had secured copies of the reports of various early explorers, among which was that of Skipper Dirck Gherritz, the Dutchman who rounded the Horn in 1599. Another was the report of the captain of the Spanish corvette *Atrevida*. Both of these reports mentioned lands seen south of Cape Horn.

While the existence of these lands was doubted by most geographers, because no one had seen them in recent times, Captain Fanning believed in them. For while he was at the South Georgias, with the Aspasia, he had seen immense icebergs and fields of ice sailing with the southwest gales, which prevailed most of the time, and he had previously observed that such masses of ice were formed only in connection with lands of considerable extent. The ice convinced him that land was to be found "somewhere between the latitudes of 60° and 65°

south and between 50° and 60° west" (pp. 428-429, "Fanning's Voyages").

Because the captain and his friends had already made fortunes in just such ventures they were ready, when the fishery failed in 1817, to venture the capital needed for a search for the Auroras. For this purpose they selected "the brig Hersilia, a fine new vessel, coppered and fitted in the best manner." Captain James A. Sheffield, an experienced and successful sealer, was placed in command. The selecting of the crew, which now became the duty of Captain Sheffield, is worth a few words of explanation.

The Hersilia was to sail into waters that were not only uncharted but they had not been visited, so far as could be learned, since the two vessels mentioned above had seen the lost lands. But it was very well known that the whole region south of the Horn was lashed and torn by storms of snow and sleet, in summer as well as winter, and that even a week of pleasant weather was rarely seen at any time of the year. Further, during the summer season, when the Hersilia was to arrive, was the time when the ice fields of the region broke loose from the land and were driven before the all but ceaseless gales. It was known, too, that the ice masses around which the gales raged were shrouded in the blackest of fogs and blotted from view by heavy snow squalls for many days at a stretch.

Finally, the islands, if found, were sure to be surrounded by reefs and sunken rocks upon which the brig was likely to strike whenever she ventured near enough to learn where the seals were to be found.

For junior officers, Captain Sheffield needed men, of each of whom it might truthfully be said that "he could smell his way through fog by night from Hell Gate to Providence." So, he invited young Nat Palmer to go along as second mate, although the boy had never made a deep-water voyage. Whereupon Nat, with love of adventure spurring him on, accepted the invitation.

CHAPTER III

LEARNING THE COURSE TO THE SOUTH SHETLANDS

THE Hersilia left Stonington in July, 1819, bound, first of all, to the Cape de Verde Islands for salt with which to cure the furs she was to get if and when she found the Auroras. Seal skins were commonly cured by drying, in those days, but it was believed that the rains, sleets and snows prevailing in the region south of Cape Horn would prevent drving. Having purchased 600 bushels of salt at the islands the brig squared away for the Falkland Islands, where she stopped to fill her water casks and to refresh her crews. For scurvy was the scourge of the sea, and fresh provisions provided the only known remedy. The Falklands, though a treeless group, had been stocked with cattle and hogs by early explorers, and both kinds of animals had thrived. Then thousands of wild fowl came there in the nesting season and their eggs were to be had in any quantity; for it was in October, the beginning of the summer season, when the Hersilia arrived there. Furthermore, a species of grass, with stalks eight to ten feet high, abounded, and the roots and stalks were good to eat, and they were an excellent antiscorbutic.

In order to gather a large supply of fresh eggs, wild fowl, pork and beef, and of the greens, Second Mate Nat Palmer and one of the sailors were landed on an island where the supplies were to be had, as soon as the *Hersilia* arrived. The brig then sailed away to the south of Staten Island in order to carry on the search for Aurora Islands during the time the two men were gathering the supplies.

Leaving young Palmer and the sailor thus and going on with the search was characteristic of our sailors of the sail in those days. A captain from Europe would have anchored at the island while the crew as a whole gathered the supplies—as one did do while young Nat was there. But Sheffield had come to search for seal islands and he would not spend even one day unnecessarily in port. He was thus not only economizing time but he was doing all he could to forestall any other vessel that might come to those waters on the same errand. The American sailor of the sail was not to be "caught napping." And it was because young Nat was especially alert that this exploring voyage proved notably successful, and is now memorable for something more than the profit secured.

One day while Palmer and his man were busy with their work, they saw a strange sail—a brig that was manifestly not the *Hersilia*—appear in the northwest. A little later it was seen that she was heading in to make the harbor in their island. One account says that young Nat then went off and

piloted her in but another makes no mention of his going to meet her. It is certain, however, that when she had anchored in the harbor young Nat perceived that she had been elaborately fitted out for sealing. He now wanted to learn where she expected to find seals—whether she was to work the well-known rookeries or some that were newly discovered; and if the latter, where they were located.

What he did learn was that the brig was named Espirito Santo. She was from Buenos Ayres but she was owned by Englishmen and was manned by English sailors. American and British writers were constantly nagging each other in those days, but young Nat and his man were cordially received by the English captain. In return the two Yankees went to work to help the British crew secure a full supply of fresh provisions; and Yankee efficiency soon overcame any lurking prejudice which members of the crew of the Espirito Santo may have held.

Pleasant relations having thus been established, young Nat was able to learn that the brig had been fitted for a short voyage. Where she was bound her crew naturally refused to tell, but why she had been fitted out was told. A seal island had been discovered in recent times by a merchantman rounding the Horn, and the Espirito Santo was to make the first killing.

The story of the discovery of this new island is now told in Findlay's "Sailing Directory for the

South Atlantic Ocean." A British brig named William, Captain William Smith, of Blyth (he was later knighted), was in those days plying regularly between the River Plate and Valparaiso, carrying freight, passengers and the mails. Nowhere else in the world was a regular service maintained under such distressful and perilous conditions as those prevailing along the route around Cape Horn. The passage of the William to the west was usually made under especially bad conditions because the prevailing winds were from the west. Gale followed gale in swift succession and every blast was laden with snow, sleet and spray. The decks became at times coated with ice and the rigging was frozen stiff. The little brig on some voyages beat to and fro for many days at a stretch without making a mile on her course to westward; and it sometimes happened that she was driven so far back and away from her course that a week of fair winds was needed to enable her to recover the position from which the storm had driven her.

In February, 1818, one of these storms came upon her as she was beating to westward. The wind (and the current as well), carried her helpless, to the south as well as the east, and while she was thus wallowing in the seas, the murk of the storm opened and a mountainous island covered for the most part with ice and snow was seen. Because no land was marked on the William's chart of that region, Captain Smith, on his return to

Buenos Ayres, sent a report of what he had seen to the Board of Trade, in London. Then, on his next passage westward, he reached down to make a more careful examination of land. His report of what he then saw was in part as follows:

"I... discovered land on the 15th of October at 6 P. M. in lat. 62° 30′, long. 60° W. by chronometer... Hauled off during the night... At daylight stood in ... got the island to bear N. W. distant half a league... Finding the weather favourable we down boat and landed; found it barren and covered with snow. Seals in abundance."

It was this report, as made in Buenos Ayres, on his return thither after this second voyage, that had brought the *Epirito Santo* on a sealing expedition. She was sailing on definite information about an island of which the people of Stonington had heard rumors.

That the Englishmen did not tell young Nat Palmer where the island lay was entirely natural. Their hope of large profit lay in keeping the position of the island secret. But the young sailor did learn that the island had been discovered by a vessel which had been blown from its course while sailing to the west around the Horn. The quick-witted youth then reasoned that the new land must lie east of the longitude of the Horn. Further than that it was probable that the brig had been lying to on the starboard tack, when the island was seen, be-

cause she would inevitably take that tack in order to drift away from the reefs around the Horn. He knew that while lying to thus on the starboard tack every blast of the gale had certainly driven her a longer distance to the south than to the east—her course while drifting had been, very likely, to the south-southeast. So the young sailor reasoned from his experience when drifting with the gales through the fogs of Long Island Sound, during previous years. It was because of that experience that he had been brought on the expedition, and now his ability to figure out the course of a drifting ship was to be of very great service.

When the Espirito Santo left port, young Nat watched her as long as he could see her and thus learned that she was sailing on a course which would take her to a point where he estimated the William had found the new land; and he impatiently waited the return of the Hersilia.

At the end of three days the brig came sailing into the harbor. As soon as he boarded her young Nat told his story to Captain Sheffield and gave his estimate of the course to take. The captain at once concurred in the estimate; and after taking on the fresh food young Nat and the sailor had secured, the Hersilia made sail in the wake of the Espirito Santo. For four days she held the course as laid down by young Nat and then, as the afternoon waned, the lookout at the forecrosstrees gave the thrilling cry of "Land ho!"

The islands to which Second Mate Palmer had thus instinctively guided the Hersilia are now known as the South Shetlands. As described in various works the group is an archipelago of volcanic origin which is 260 miles long if measured in a northeast and southwest direction. There are ten large islands, all of which are separated one from another by deep channels, but around all of these are many islets and reefs where the depth of water is unknown. At the northeast end the largest of the group is named King George (Powell's chart). The next largest, Livingston, lies near the southwest end of the chain. Smith's Island, named for the discoverer, William Smith, is well off to the west of Livingston, but the most interesting of the whole group, to the ordinary reader, is a small one south of Livingston which was named Deception by the Yankee sealers, and it still holds that name.

Nearly all of the islands are mountainous, the peaks rising from 2,000 to 3,000 feet above the sea, and one on Smith's Island is 6,600 feet high. Every mountain is covered with snow the year round, save for a narrow rim near the sea, and in every canyon is a glacier. No soil or even sand is found in the bare terrane alongshore (save only in Yankee Harbor), but there is mud at the bottom of some of the harbors. Broken and ragged lava formations are seen wherever the snow is melted away in summer, and the only vegetation is a sort of moss.

The shores of the larger islands are all deeply indented with fiords and bays, thus providing many harbors, some of which are land-locked and safe in the worst storms.

When the air is clear the islands are visible from incredible distances. Dr. Eights, a scientist who went there with an exploring expedition to be described in another chapter, wrote that "the numerous furrows and ravines . . . are distinctly visible for fifty or sixty miles" (Niles's Register, May 8, 1834). But while he was there, "not a day occurred that snow did not fall, or ice make on our decks. . . . The prevailing winds were from the southwest and northwest." A current that flowed constantly from the southwest was observed, and when this was measured later, by Captain Palmer, he ascertained that the speed was three knots an hour.

Dr. Eights wrote that "there were evidences of a number of active volcanoes in the vicinity," and numerous pieces of pumice stone were "strewed along the beaches."

The wild life of the islands attracted more attention from the doctor than any other feature. "In calm weather great number of whales were seen breaking the surface of the ocean between the numerous icebergs. . . . When they perish their carcasses are taken by the billows and thrown far upon the land; here they are left by the waves and in a few hours their bones become perfectly denuded by

the numberless sea birds that feed upon their flesh. . . . Entire skeletons of the whale, fifty or sixty feet in length, are not infrequently found in elevated situations—many feet above the highwater line."

Dolphins and porpoises abounded. There were seemingly millions of the birds of the region, varying in size from the albatross to the stormy petrel. It is said that the petrels laid their eggs in a heap of warm volcanic ashes found on one island and that the eggs were hatched without further care from the mothers.

No adequate description of the dangers of navigation among the group has ever been written, or can be. To say that hundreds of icebergs and other masses of ice, including vast fields, are to be seen among and around the islands at all times does not suffice; but if the reader can imagine those ice masses clashing together during the hurricane squalls and while dense fogs and blinding snow squalls prevail; and while the drag of the currents among the reefs is added to all other dangers, perhaps the situation of sealers afloat there will be comprehended; and some idea of the conditions under which the Stonington sailors gathered their harvest will be had.

As it happened when the Hersilia arrived within view of the group the weather was vile. For two days she lay to in the lee of an island. Then the air cleared, the sea became smooth and she was able to stand into a harbor which could be seen when off shore. When close in, a boat was lowered with

which young Nat went ahead to look for a clear channel. Rounding a point at the entrance of the harbor he saw the Espirito Santo at anchor within, but no one was to be seen on her deck. Accordingly he rowed alongside and, climbing on board, looked around, only to find that she seemed to be wholly deserted. Then he walked to the open main hatch and saw in the hold the captain at work with a boy, salting down seal skins.

Young Nat's footsteps made the captain look up hastily, and with an exclamation of surprise he recognized the youth who had helped to provide fresh supplies for the Espirito Santo at the Falklands. But the Englishman was what would now be called a good sport.

"Never mind," he said. "There are plenty of seals for all."

It was so. The rookeries were covered with thousands of seals of all sizes. Both crews were able to secure full cargoes from the finest of the herds. It is a memorable fact, too, that when the Englishman had finished his own load he turned to and helped the Hersilias to complete their cargo. He was working on the theory that "blood is thicker than water," to quote the words of another sailor which were expressed years later in China.

In order that the reader who is not familiar with the seal fishery may appreciate the work of young Palmer at the Shetland Islands, it seems needful to interrupt the narrative of events and describe

in some detail the methods by which the sealers secured their furs, and to give a few notes on the habits of the seals.

According to the records the seals of the Antarctic come to the beaches to which they resort during the month of November. First of all the old males. called wigs, appear and take stations on the rocks and shingle alongshore. The most powerful of these seals choose places near the centers of the largest beaches. The less powerful go where they will be undisturbed by the big ones; for vicious battles occur when two old wigs come anywhere near each other.

In a few days the females follow and soon bring forth their young. They are meantime gathered into large harems around the more powerful males in the middle grounds and into small groups by the outlying males. The larger groups number anywhere from fifty to a hundred while the outlying males may have no more than four or five or even one.

The young males of from two to four years of age, being unable to compete with their fathers, gather in herds apart. The skins of these youngsters always bring the highest prices in the market.

After the young are born the mother seals go out to sea for food, leaving their young (one each) asleep in the midst of the masses of other young. They are away feeding for hours at a stretch but when they return and call to their pups each is answered by her own, and each goes to her own without error.

The large assemblies of seals are called rookeries. Small assemblies numbering from two or three up to a dozen or so are to be found on some of the flat-topped rocks that rise above the tide off shore. Rocks of the kind found on the half-tide reefs usually have a few seals as regular visitors. No matter how heavy the pounding of the surf on the reefs around such a rock, the seals come snorting and playing through all, climb the slope to the crest and there, where the spray is continuously thrown upon them, they stretch out and go to sleep.

The work of securing seal skins was in some respects the most dangerous and perhaps in all respects the most disagreeable known to our sailors of the sail. It was especially so during the second voyage of young Palmer to the South Shetlands because of the competition. When two vessels only were among the islands (as during his first voyage), the men could choose their rookeries and consider the conditions of the weather with an eye to safety if not for comfort. But with thirty most energetic crews competing among the islands, as happened at the South Shetlands during the season of 1820-1821, every day was a working day, and to secure a full harvest it was necessary to visit the outlying rocks as well as the populous rookeries.

Whaleboats were used to carry the men from the vessels to some of the smaller rookeries. These

boats were around 25 feet long, 5 wide and 2 deep. White oak was used for their frames and half-inch cedar for the planks. In model these boats were like those of the Vikings-sharp at both ends. When afloat each boat was manned by five or six men, one of whom was usually a mate who stood at the stern and steered by means of a long oar. As second mate of the Hersilia young Nat had plenty of experience in handling these boats, and when a landing was to be made through the heavy surf on a rock-strewn beach he held the lives of the crew in his hands. For the rookeries were always found on the beaches exposed to the seas. The waves came unimpeded over a thousand miles of open water, and where they crashed down on the rock-strewn slope-where the whaleboat had to land-they covered and concealed numberless bowlders and rock masses which were death traps for the sealers. But the young mate, standing with legs wide apart at the stern, and with both hands on the long steering oar, peered through the spoondrift ahead for the hidden reefs, the while he instinctively hastened or slowed the stroke of the oarsmen until a great wave lifted the boat on its crest and then rushed on until it flattened out where the water shoaled so that the men could leap over the rails and drag the frail craft up to safety.

Taking seals from the off-shore rocks was still more trying. At first thought one would suppose that the sealers would wait for a quiet day and then row out to the lone rocks and capture the seals at ease. But the fact is that many of those rocks were not to be scaled in quiet weather, for they were steep-sided and towered high above the still water. It was only when storms prevailed and the waves rolled high enough to lift a boat up to the level of the top of the rock that the seals there could be secured.

Consider, now, how these seals were taken from the rocks. Waiting until a gale came to drive the needed high waves directly past a deep-water face of the seal rock, the crew of a whaleboat rowed away to a point say a half-mile up wind from the chosen reef. There the boat was turned and headed back directly for the rock, when the men at the oars pulled steadily until the mate judged they were within striking distance, which means that he believed the boat, with lively rowing, could be sent past the rock on the crest of one of those immense rollers which come in threes. Then the bow oarsman took in his oar, picked up a club, slipped a coil of whale line over his arm and stood up on his thwart, facing the rock. The crew, meantime, pulled their oars with all their might until the boat seemed about to crash against the rock, when the mate turned the bow to one side, the oars were allowed to trail and then, as the boat drove swiftly past, the bowman leaped forth to land on the rock as best he could.

Occasionally a man fell short, and was picked up

or drowned as the case might be, but usually a landing was effected; when the seals were knocked in the head and skinned. Of course the man and his catch were recovered by similar dashes past the rock, the bundle of skins being hauled off, first of all, by means of the whale line.

During Captain Nat's second voyage the sealers from thirty different vessels (and more especially the English and the Yankee sealers) eagerly raced through the living storms of the South Shetlands to positions from which a man could leap from a driven boat on the crest of a wave to the crest of a rock which was at all other times inaccessible. One hundred years later—on a day in July, 1920—a British crew and an American crew, each the pick of its own nation, went out to sea off Sandy Hook, New York, to sail two splendid yachts in a friendly competition for the most famous trophy known to the history of manly sports-the America's cup. As a piece of silver the cup was insignificant, but to win it was to secure the leadership of the vachting world. It was a contest for Honor.

But when the yachtmen arrived at the old lightship they found the wind blowing at the rate of twenty knots an hour and the sea was rumpled. One look upon the rumples was enough for them. It would never do to sail a yacht only 70 feet long on the waterline under such dangerous conditions as prevailed, and, squaring away, they hastened back to the sheltering arm of Sandy Hook.

Whether the sealers worked on the beaches or the outlying rocks, they were continuously drenched by the spray and the spoondrift and the solid water into which they leaped; and by the sleet that fell upon and coated them with ice. They were chilled by the piercing gales. They often slipped and fell on the rocks and were painfully bruised. They were sometimes bitten by the seals and sometimes thrown headlong by a rush of the herd they were trying to kill. Now and then, a boat's crew was overturned by a curling wave and her crew were lost. Now and then a man was killed by a fall over a precipice.

When at nightfall they returned in their water-soaked clothing to the ship there was no fire in either the cabin or the forecastle by which they could warm their chilled bodies. But the records show that the men of the sealing crews were all so eager to take part in the work that the cooks and cabin boys left their easy berths on the ships to go afloat in the whaleboats; and the only grumbling heard came from the man who was necessarily left on each vessel as keeper.

There is another record which says that the wealth of Stonington is founded on the accumulations made by those sealers. What would those sailors of the sail who were thus developing a wealthy community as well as harvesting a fortune each for himself—what would they say if they could return and meet the men who now organize labor monopolies by which to limit the production

of the most skilled to that of the weaklings and slackers?

Nearly all of the catch of the Stonington men, in 1820-1821, was secured by companies who landed and made camps on the islands close to the rookeries. By day they killed and skinned as many seals as they could, the average day's work being fifty skins. Night and morning they cooked the food brought to them from the ships by means of fires made of seal fat-Eskimo fashion-and they slept on boards laid for floors in the canvas-andboard huts in which they lived. These men were really more comfortable than those who lived aboard ship, for they had fires in their huts by which they could get warm. The smoke of the burning fat made them all as black as Negroes but that was a matter over which they cracked many a joke.

A part of the work of curing the skins, as every trapper will recognize, was cleaning the fat from the flesh side. This was done as tanners do such work—by shaving the blubber off with a "beaming knife"—a back-breaking job.

Because some who read this biography are sure to be shocked by what they will call the merciless slaughter which exterminated the seal herds, it seems needful to say first that the slaughter was not cruel. The seals were killed by a single blow on the head, for the skull was thin and easily crushed in. Death was instantaneous. As for the extermination of the herds the blame should be placed upon the state of civilization then prevailing and not on the sealers. The islands where the seals were found might have been preserved, as Lobos Island was preserved at the mouth of the River Plate, and as the Pribalov Islands of Alaska are now preserved; but it was the business of government—any government willing to do the work—to preserve the herds at the Shetlands and elsewhere and not the business of the sealers. As long as no nation was sufficiently civilized to do this work, each sealer was obliged to take as many as possible while there were any to take. It was a free-for-all contest and the men who were most successful are now memorable for their courage and prowess.

The Hersilia, in the voyage which began in 1819, had salt for only 10,000 skins—600 bushels. The skins of young bachelor seals were therefore selected. When the salt had all been used the crew made all sail for home and kept the little brig traveling. In Stonington the skins sold for \$2 each, or \$20,000 for the cargo, say eight times the cost of the entire outfit. Young Nat's share of the cargo was probably one in 35, or say 280 skins which sold for \$560. For that day the pay of the young man for this voyage, lasting eight or nine months, was considered something memorable.

When the *Hersilia* had discharged her cargo at Stonington the owners at once began fitting out another expedition for a voyage to the newly dis-

covered rookeries. It was certain that the Espirito Santo would return there, and that many other sealers would also go; for it was impossible to keep secret the fact that a new seal island had been found, and even its location was sure to become public property.

Because the wit and knowledge of the young second mate had carried the *Hersilia* to the new rookeries, it was a matter of course that he should have a position in this second expedition which would accord with his abilities; in short that he would be promoted. In the usual course a young man in his place would have been made a first mate, but when he sailed from Stonington, the next time, he was captain of a most important vessel, and the success of the expedition was to depend to a large extent upon his work.

CHAPTER IV

MASTER OF A TINY TENDER

THEN the Hersilia returned to Stonington, bringing a story of new seal islands discovered near the place where the mythical Auroras were supposed to lie, and with 10,000 prime seal skins to prove the tale, she created intense excitement along all the New England shore. The fact that the furs were of unusual beauty was almost as interesting as the statements regarding the number of seals among the islands.

Straightway, the owners of suitable vessels at Salem, Boston, Nantucket, New Haven and New York began to fit out expeditions to compete with Stonington for the furs on the new group; while the owners of Stonington vessels not only refitted the Hersilia but they added several others and then proceeded to build one especially for the coming season. In all five brigs and two schooners were provided, besides a sloop which was constructed for the work. The names of the vessels were: brigs, Hersilia, Frederick, Catharine, Emaline, and Clothier; schooners Express and Free Gift. The sloop was built for a tender or waiter-in-general for the other vessels, and, not without reason, she was named Hero.

In several respects the sloop was a most interesting vessel. An old document shows that she was built at Groton, Conn.; she was owned by W. A. Fanning and Elisha Faxon, both of Stonington, and she measured 44 40/95 tons, "as per register granted at New London the twenty-fifth day of July, 1820."

The dimensions of the *Hero* other than her tonnage have been lost, but if the rule under which she was measured for tonnage be considered in connection with the purpose for which she was built, it appears that she was not to exceed fifty feet long on deck by sixteen or seventeen wide and six or seven deep. That she was broad and shallow in proportion to her length is certain, first, because that was then the favorite model of all American builders, and next because a shoal draft was necessary in a vessel that was to be used for exploring the uncharted islands to which she was bound.

By comparing her dimensions with those of the sloops which were then employed by the hundred on the Hudson River one may get a better idea of just how small she was for the voyage to a region 300 miles below Cape Horn. For some of the Hudson River sloops were of three and even four times her tonnage although they were designed for inland water traffic. For another comparison it may be noted that she was less than half as long

as the yachts which competed for the America's cup in July, 1920. Ordinarily she spread two or three sails to the wind, a big mainsail and one or two jibs; but when the wind was fair she set a great squaresail. Because of the relative size of the mainsail the sloop rig is much harder to handle in heavy weather than a schooner of the same size of hull. It was for this reason that the tender of the Wilkes exploring expedition was built with two masts.

As to the shape of the Hero's hull it is to be noted that while one which is broad and shallow is admirably adapted for sheltered and smooth waters it is dangerous on the open sea. For, if a broad hull fifty feet long falls off from a storm wind until she is broadside to it, and is rolling in the trough of the sea, a curling wave is likely to hit her under the quarter as she rolls and turn her bottom up instantly. The records show that even experienced Yankee crews have been thus imprisoned and lost.

The most important work for which the *Hero* was designed was exploring the island group. She was to sail here and there along the coasts and among the reefs to search for the rookeries sure to be found there; and this work would be all the more important because many competing vessels were to go to the South Shetlands during the ensuing season.





Born August 29, 1816. Died January 15, 1865. Theodore Dwight Palmer. Born January 26, 1806. Died October 22, 1894. Alexander S. Palmer.



Whaleboats might have been used for the explorations, and they were so used by other vessels of the fleets; but the Stonington men had seen that the group was more than 200 miles long and that the coast line would measure thousands of miles in extent. Something larger and more seaworthy than a rowboat, and yet smaller and handier than the schooners, was needed—a vessel, in short, that could enter all sorts of harbors and skim all sorts of beaches and reefs.

Because of the character of the work the *Hero* was to do and because of the vile weather in which it was to be done, a master was needed who was at once venturesome, courageous, and withall able to handle a sloop rig; and young Nat Palmer was the man chosen to fill it. His mate was named Phineas Wilcox.

Carlyle, in one of his essays on the Vikings, notes that they made their voyages in vessels which carried them low down in "the moaning brine," and that such voyages gave them a superior training. The little sloop Hero, with her gunwale a foot out of water when in port, and her lee rail buried in the froth when at sea, afforded just such a school for Captain Nat Palmer. Bjorni, who sailed from Jutland to go to Greenland to drink Christmas ale with his father, and while on the way was driven by storms to the coast of America—Bjorni was trained in no better school, and he showed no more

courage than the boyish sailor of the sail who commanded a smaller vessel among the reefs and ice-floes 300 miles below Cape Horn.

The Stonington records contain some interesting data concerning the fleet of 1820-1821. For example, upon a worn and ragged slip of paper is written a list of supplies, as follows:

Memorandum Sloop Hero.

Two composition rudder braces and two do. pintals for hanging rudder with the bolts and nails for do.

200 sheets, half 18 oz. half 20 oz. Best London copper.

150 2 inch composition nails for sheathing coppering.

150 I inch composition do for coppering.

300 Best smoothing sheeting paper.

7 Bolts best Russia duck 6 ditto Bear Rowans.

A sheet or charts of So. America from the Equator to the highest South Latitude beyond Cape Horn. These can be got at Patton's. A sheet of charts of all the Atlantic Ocean.

To a sailor the fact that spare pintals and rudder braces and sheathing copper were carried is most interesting. For these extras show that the sloop was expected to strike on some reef among the islands, and so wreck the rudder and break in the bottom planks—after which, however, she was to be hauled off and repaired. They would never give

up the sloop.

The same paper carries a list of the supplies provided for two of the brigs and from it we obtain an idea of what all the crews had to eat and drink, as follows:

60 hhds. Navy Bread

60 bbl. Mess Beef

40 bbl. Mess Prime Pork

4 bbl. white Beans

4 do. Peas

4 do. Vinegar

10 qt. Mustard

2 gr. chest Campay tea

30 do. Pepper

4½ bbl. Rum

4 bbl. Gin

6 tt. Codfish

2 boxes dip Candles

I do. Sperm to be divided

2 boxes Soap

8 bbl. kiln dried Corn Meal

4 bbl. Corn

50 bushels potatoes

3 bbl. dried apples

5½ Rice

12 bbl. Flour

220 tt. Coffee

Then follows a long list of ship stores which included lumber, spikes, paint, spare oars (forty that were 16 feet long and twelve that were from 21 to 24 feet); tools, boat anchors, tar, whale line, fish lines, guns and ammunition. When all these stores had been written down the maker of the memorandum returned to the kind of supplies found at the head of the list and added these:

5 doz. Fowls 5½ bbl. Sugar 2½ bbl. Rum 21/2 bbl. Teneriffe Wine.

The implements needed in taking the seals and preparing the skins were these:

200 hoop poles 8 doz. skinning knives 6 doz. steels for do.

2½ doz. skinning knives to be made by R. Brown

1/2 doz. beaming knives to be made by do.

The hoop poles were cut from hickory saplings and were perhaps ten feet long and say an inch or more in diameter at the small end. Each pole afforded two clubs with which the seals were knocked in the head. In later years of the fishery the poles were cut up at home and each end was protected with an iron ring, because, in the hurry and excitement of the killing, the men frequently missed a seal and struck a rock instead, thus rapidly wearing the clubs to a frazzle. Later still (1880) the sealers used rifles because the seals were so wild it was impossible to take them with clubs.

Perhaps the lists of food supplies should receive further attention—at least to note that the men had plenty to eat and drink. In referring to the food supplies of the sealer *Neptune*, which was at the Falklands in 1797, the supercargo, Eben Townsend, wrote:

"A sealing crew want a good stock of bread, molasses and peas for coffee, and they can get along with little beef and pork; but to be out of bread, or molasses for sweetening their coffee, is very uncomfortable. They get very much attached to what they call slops, which is tea and coffee, in this cold, uncheerful country." To this he adds: "They cook the haslet [heart and liver of the seal], with the fat of the seal both for fuel and fat, and it tastes very much like a hog's haslet."

Of course the numerous birds and their eggs were used as food, and the sealers caught many fish. That the Stonington fleet was well supplied with material for "slops" and the much-needed sweetening is apparent. They also had a plenty of flour and dried apples for duff. As a matter of fact, American ship owners as a class always made boast of the amounts of food supplied to the seamen. The crews were required to work hard, but never on empty or half-filled stomachs. The exceptions to

this rule have been so often described by unfriendly writers that the usual conditions found on American ships have been obscured. American sailors were always fed better and were really more comfortable than those on any other ships afloat.

CHAPTER V

CRUISING AMONG THE SOUTH SHETLANDS

THE log book of the Hero, while under the command of Captain Palmer during his second voyage to the South Shetlands, is a most interesting and valuable historical document because the little vessel was then sent on an expedition to look for seals during which a long stretch of the Antarctic Continent was explored for the first time—the coast which now hears the name of Palmer Land. The ordinary log book used by whalers and sealers, in those days, consisted of a few hundred large sheets of soft writing paper folded once, sewed with a stitch or two of sail twine to form a book, which was then bound with a piece of canvas cut from an old sail. The log of the Hero was a blank book manufactured for the purpose. It was something like an old-fashioned diary. The leaves of this book are made of a soft writing paper, each being 8 x 13 inches large. Ruled spaces at the top of each page are provided in which to write the date, the course made by the ship, the character of the weather and the latitude and the longitude, each as determined by observation and by dead reckoning. Below these ruled spaces were ruled lines which

were numbered for each hour of the day and on these lines were to be written whatever notes the captain or his mates might wish to make.

On the first page of the cover (a stout, flexible paper) is a printed title, with a picture of an old-fashioned ship under all plain sail. Below that is an advertisement of the publisher. The whole title is as follows:

The
Seaman's Journal
Being An
Easy and Correct Method

OF
Keeping the Daily Reckoning

OF A
Ship,
During the Course of Her Voyage.

The advertisement announces that "J. Desnoues, printer, 11 Nassau Street," issued the volume and that it was "sold by Samuel A. Burtus, at his Book Store and Lottery Office, No. 19 Peck Slip, corner of Water Street," New York.

To preserve this book during the voyage, Captain Nat covered it with canvas, neatly hemmed and sewed on. Inside of the back of this canvas cover is a pen-and-ink sketch of a two-masted schooner, carrying all plain sail, including a square fore topsail and topgallant sail, in a spanking breeze—a live picture in spite of the material upon which it was drawn. One may suppose that the boyish cap-

tain drew it with the schooner Express, of which it is a picture, under his eye at sea.

The first entry in the log, dated August 1, 1820, reads:

"Commences with fair weather with breeze from WSW. At 6 PM made Block Island. Bore by compass NNW ½ W distant about 4 leagues from which I take my departure. Course SE by E."

The writing is small, ornate and easily read, save where the ink has faded or has been worn away by handling. The spelling is with rare exceptions correct and the few mistakes are manifestly due to inadvertence rather than ignorance.

Ships' logs are always monotonous records of weather, speed, course made, and so on, and the Hero's is no exception in this respect during the passage to the Falkland Islands. But it may be noted that while all the vessels of the fleet had sailed together from Stonington, only the Hersilia and the Express were in view of the Hero on the 5th of August. Each was making the best speed possible for the destination, regardless of what the others might do. After the 5th the Hersilia disappeared, but the schooner Express and the Hero were in company all the way to the first port.

The entry dated August 6 says that the weather was "dark and glowery," but the young captain "set squaresail," after which a heave of the log showed that the sloop was making eight knots. That day's

run—from noon of the 6th to noon of the 7th—was 160 sea miles. The best day's run of the passage was 175 sea miles, which was a notable achievement for a fifty-foot boat.

On October 17, 1820, the entry reads:

"Commences with fresh gales from S West and clear weather. At ½ past 1 made the land bearing S E & S W. Stood in for it. At 4 P M bore away before the wind, running alongshore the whole night. At 6 A M made the Volunteer Rocks. At 10 anchored in Berkeley Sound. Found there two shallops belonging to ship G. Knox. The Express in company."

Berkeley Sound is in the northeast corner of the Falkland Islands. From this anchorage the *Hero* and the *Express* worked west along the north coasts of the group, gathering fresh meat, wild fowl and so on, for several days. Other vessels of the fleet were met on the way. On October 27, at 4 P. M.,

"Got under weigh for Staten Island. Soon after we were boarded by a boat from the *Catharine* who informed us that one of her boats had upset, and that Perry, the officer, and another had drowned—that two men were left hanging to the boat. Took the boat in tow to look for them. At 8 being down almost to Kidney Island, the boat left us."

The loss of four men, thus briefly mentioned, indicates the danger of the work in which the sealers

were engaged. For the lost boat had been turned over when at sea and it had then gone adrift where the other boat's crew and the men of the *Hero* were unable to find it.

The Hero with the Express entered Woodward Harbor, Staten Island, on October 31. Several days were spent in gathering fuel and exploring the coast. Plenty of eggs were found, "but all were spoilt." Meantime "got a bulkhead chimney built in the caboose." The sloop's rigging was carefully overhauled to see that every part was fit to withstand the hurricane blasts of the far South. One day the sloop's crew "went down the harbor sealing and got seven."

The two vessels left for the Shetlands on November 5. "Heavy gales, rain, fog and snow" were encountered on the way down, but on the 8th the weather was pleasant and the wind fair; so all hands were "employed grinding knives" ready for skinning the seals.

On the 9th the log says "we are anxiously looking for land. Plenty of penguins, whales and gulls about us." They saw Smith Island, the next day, and squared away for a harbor in Ragged Island, which lies off the southwest coast of Livingston, (Powell's chart), but vile weather kept them at sea until the 12th when this entry appears:

"Commences with thick weather, fresh breeze N by E. At 4 P M saw Castle Rock. Stood in for Ragged Island. At 8, being in the mouth of the

harbor, we were boarded by a boat from the *Hersilia*, Capt. Sheffield. He informed us that he had been in 12 days, and that the *Frederick* and *Free Gift*, Captains Pendleton and Dunbar, were in a harbor on the opposite side of the strait. At 10 came to alongside the *Hersilia*. Let go the sheet anchor in four fathoms of water."

Captain Palmer then called away a boat and crossed to President Harbor, where the vessels mentioned were at anchor, in order to report to Captain Benjamin Pendleton, the commodore of the fleet. While there he learned that there were "no seals up"—the season was not yet open.

The next day the Hersilia, the Express and the Hero were all anchored in President Harbor. From subsequent entries it appears that the vessels were taken to this harbor because a great stony beach, to which the seals were sure to come, was to be found near the port. Lumber and sails were landed with which to erect shacks for the men to live in when working the rookeries. While this work was in hand, fog with rain and snow commonly prevailed, but when a pleasant day finally did come the log of the Hero notes that her captain and Captain Dunbar went "shooting gulls, chickens, &c. with great success," after which "Capt. Dunbar with Mr. Pendleton dined with us."

Nearly all the furs taken by the Stonington fleet in 1820-1821 were secured by men who built camps

near large rookeries, and from day to day killed as many seals as they could by hard work handle. The killing did not frighten the seals that remained undisturbed meantime. It was the custom to "cut out of the herd" a "bunch" (if one may use the cowboy terms) and drive them slowly up the slope of the beach—slowly because undue haste heated the seals and injured the fur—and then, when a few rods from the main herd, knock them down with clubs.

The seals thus segregated did, sometimes, make a dash for the sea and sailors who tried to stop them were often thrown violently on the wet rocks. Occasionally a man has been killed in that way. But the main herd was never seriously alarmed by such a flight, and the slaughter was continued from day to day until the valuable animals had all been secured.

As the record shows the rookery adjoining the camp on President Harbor was the resort of a great herd, but Commodore Pendleton perceived, even before the seals hauled out, that it would not furnish enough skins for his entire fleet, and he therefore ordered Captain Nat to go in search of others. The Hero sailed on this exploring expedition at 2 o'clock in the afternoon of November 15, and, as the log says "stood over for Deception, course E for the north head. . . . At 8 being close in with the land," tacked off shore for the night. "Middle part thick snow storm. At 12 two-reefed the main-

sail" and "tacked to the East. At 5 made the land and stood along to southard and eastard. Saw what we thought to be a harbor. Lowered down the boat and examined it but were disappointed. Stood along the southard. Saw an opening—stood in—found it to be a very spacious harbor with very deep water—50 and 60 fathoms. Got out the boat to sound," and "found anchorage about a mile and a half from the mouth. At 11 we came to in 18 fathoms off the mouth of a lagoon. Went on shore and got some eggs. Ends with thick weather and calm."

That is to say this little sloop was adrift throughout the night upon an unexplored sea. A snow storm that shut off the view in all directions prevailed and the wind was so heavy that the sail was reefed. It was reasonable to expect that reefs were to be encountered down wind and icebergs and floes were adrift on all sides. But neither the discomforts nor the dangers gave the crew of the *Hero* a moment's worry.

The harbor in Deception Island into which the sloop sailed is referred to many times in the log of the *Hero* under the name of Port William, but it was later named Yankee Harbor and it is so called now. The island was named Deception during the previous voyage and the name was descriptive because, as seen from all sides but one, it seemed to be a solid cone about seven miles in diameter and rising to height of from four to six

hundred feet above the sea. When viewed from the southeast, however, the entrance which the log mentions was to be seen; and on sailing in, a circular harbor about five miles in diameter was discovered. The island was therefore manifestly the top of a volcano, the crater of which, five miles in diameter, formed the harbor.

Because this harbor afforded a perfect shelter it was made the port of refuge of five of the Stonington fleet. A year later it was used by another sealing fleet, and later still it was used by two British surveying expeditions. The descriptions which have been published by various captains show that it was a most interesting place. Thus one captain thought the entrance was 200 feet wide and another called it a cable's length. In the entrance the water was seven fathoms deep; at the deepest point, which was the center of the harbor, it was 97. The beaches all around the interior were narrow. Smoke arose continually from small vents around the rim, showing that the volcano was by no means dead. At several points on the beaches hot springs boiled forth and one on the northeast side of the crater had such a flow that the water of the bay was warmed for a space of several boat-lengths from the beach; and this, too, although a glacier rested but a few rods away. It was possible to throw a piece of ice from this glacier into water hot enough to boil eggs. The warm water space was the resort of innumerable birds, especially penguins, which seemed to

enjoy the warmth very much. Of course the sailors found bathing there delightful.

Findlay's "Sailing Directions" says that "a species of coal was found" by the British warship Chanticleer, "which burnt very well."

As noted, five of the Stonington fleet came to Yankee Harbor. This move was hastened because the brig Frederick, the flagship of the fleet, while lying in President Harbor, was driven from her anchors by a heavy storm and narrowly escaped going on the beach.

After exploring Yankee Harbor, the Hero cruised to the north around Livingston Island and found several rookeries. One of the memorable incidents of the cruise after leaving Yankee Harbor was the result of an effort to run through a strait. The Hero grounded on an unseen ledge, but because the venture was made when the tide was rising she soon floated clear. Then, while the captain was making some needed repairs, he observed a whale head boldly into the strait, and by watching the course it followed he learned the lay of the channel.

"Where a whale can go I can follow," he remarked, and he then sailed through, but these words are not found in the log. Note of them was made at Stonington.

Having located enough beaches to keep all hands busy, the Hero returned to the fleet, that was then in President Harbor, and she was lying there when the storm almost wrecked the Frederick. She then went with the fleet to Yankee Harbor (November 24), and thereafter was employed carrying supplies from the ships to the camp at President Harbor and skins from the harbor to the ships.

In the first of these trips as a freighter, the Hero arrived off President Harbor at 10 o'clock in the morning of November 26, and found 465 skins ready for transportation to Yankee Harbor, the first that had been secured there. The herd was just beginning to arrive at these islands, and the date was just a month later than the first arrivals at the Falklands, showing that the vast herd migrated from the north to these breeding grounds.

The number of skins awaiting transportation at subsequent trips is not mentioned until that made on December 3d when the number was 905. On the next trip—she arrived off the camp on the 7th —the number was 10,000. These skins, when carried to the vessels in Yankee Harbor, were discharged from the sloop between the hours of 7 P. M. and midnight. As soon as the skins were out the Hero sailed once more for President Harbor, regardless of the fact that her crew had been doing a long hard job.

Meantime the log notes that other vessels were passing to and fro among the islands. On December 9 a ship and two shallops came to Yankee Harbor. On the 16th the Emaline and the Catharine came. They brought skins, taken on the north side of Livingston Island. The brig Clothier had been with them but a heavy gale, which they had survived, had driven her on the rocks. The wreck was to be seen there many years later. It may yet be visible.

On the whole the log shows that while Captain Palmer and the sloop's crew now had no part in the work of killing the seals, they were engaged in loading the skins from the time they arrived off any one of the camps (for others were established) until all were on board. Then they hoisted anchor and made sail for Yankee Harbor, standing watch and watch while on the way. At the harbor they helped discharge the skins on board one of the vessels there, took on supplies for the camp, and then made sail back to one of the camps. They took such sleep as they had to have while standing watch and watch between destinations. And they boasted of their ability to work thus. It was characteristic of the Yankee sailor of the sail to brag, and they all had something to brag about; but none made good in quite the manner of the sealers.

The fact that the *Hero's* crew worked for an extraordinary number of hours every day is a matter of especial interest in this tale of the sea. When opportunity to sleep was offered them they were exceedingly glad to turn into their bunks without an instant's delay. So a time came when the young captain was so tired at the end of his day's work that even the small task of writing up the log in formal fashion seemed too great; and at the same time it seemed really needless to do so. For the

entries, while the *Hero* was serving as freighter between President Harbor and Yankee Harbor, were almost precisely alike. For a time Captain Nat, being tired, wrote such entries as the following:

"Tuesday, December 19th, 1820
"Commences pleasant strong gales from S W
"Wednesday, December 20th.
"Commences moderate light breeze from south."

On Christmas day the entry made was:

"Commences with heavy gales from N E with snow."

Thereafter each day's entry ran in similar fashion until February 19th, when he wrote:

"Friday 19th."

That and nothing more. Then for three days there was no entry whatever, but on the fourth day he began to write up the log in shipshape fashion once more, because on that day he cleared the harbor and sailed for home.

And yet, during this interval of slack log writing Captain Palmer had been ordered to go a second time in search of other seal islands and while he was thus engaged he had discovered that part of the Antarctic Continent to which his name was given, and he cruised along the coast to 68 degrees south latitude—or more than 200 miles from Yankee Harbor.

CHAPTER VI

EXPLORING THE ANTARCTIC COAST

wo accounts of the incidents which led to the sending of the Hero on an exploring expedition along the coast of the Antarctic Continent have been printed. One is to be found in Edmund Fanning's "Voyages Round the World," and the other in "Stonington Antarctic Explorers," by Edwin Swift Balch. Fanning says (p. 435) that "from Captain Pendleton's report, as rendered" on the return of the fleet to Stonington, "it appeared that while the fleet lay at anchor in Yankee Harbor, Deception Island, during the season of 1820-21, being on the lookout from an elevated station, on the mountains of the island, during a very clear day, he had discovered mountains (one a volcano) in the south. This is what is now known by the name of Palmer Land."

In the other account it is said that young Palmer first saw the land and the captain's niece, still living, remembers hearing him say definitely that he thus saw the land. Some writers have thought the two accounts contradictory, but they are not necessarily so. The facts in the case seem to be as follows:

The rookery at President Harbor was being

depleted rapidly. The decrease naturally led all the captains of the vessels in Yankee Harbor to talk about a search for another rookery, and this search seemed to be all the more needed, as time passed and competing vessels gathered the skins from other known rookeries. All the other known rookeries were, in fact, occupied by sealers. It was therefore decided that Captain Palmer should make another cruise with the Hero. It was for such work that the sloop had been brought.

Before going on such a cruise it was natural that Palmer should go up to the highest point on the wall of the old crater, at a time when the air was perfectly clear, in order to see if any other islands were visible. It was also natural that Captain Pendleton should go. The direct statement that the young captain went is to be believed because he was known to be unusually farsighted. Throughout his life he was able to distinguish objects at much greater distances than ordinary seamen. At the same time there is no reason to doubt the statement that Pendleton went. It is easy to believe that both Pendleton and Palmer went together, and when Pendleton made his report at Stonington he inadvertently omitted to mention that Palmer went with him.

On reaching the high point on Deception Island the southern horizon was examined—the southern because the fleet had been working around all the islands at the north. So the loom of land was seen in the far south with what looked like an active volcano, and the *Hero* was thereupon ordered to sail away and learn if any seals were to be found there.

Copies of two entries in the log of Captain Pendleton's brig *Frederick* are among the records now to be found at Stonington. They are as follows:

"Jan'y 14, 1821. Sloop Hero, Capt. N. B. Palmer, sailed to eastward to look for more Is'ds."

"Jan'y 28th, /21. 6 A M the sloop came in after examining northeast and southwest to their satisfaction. Found none."

It was therefore on January 14 that Captain Palmer sailed from Yankee Harbor on the voyage which was to place him beside Columbus in so far as he and Columbus were the only known men who have discovered continents; for the name of the man who discovered Australia is not known.

To appreciate the dangers of the voyage upon which the captain was bound it is only needful to recall the fact that he was under orders to explore a region, to the east as well as the south, which had never been visited by men; that he was to work his way among floating fields of ice and uncharted reefs; that hurricane squalls with blinding snows were sure to overtake him at frequent intervals, and that if the *Hero* were pinched between icefloes or stranded on the rocks there was no hope of a rescuing party

ever finding the wreck. But Palmer and his men faced the dangers with insouciant minds and even with pleasure. They were thrilled with a feeling that is now lost because there is but little of the world left to explore.

Of this remarkable expedition it appears that no account was ever written by a member of the Hero's crew; or if one was so written in the back of the log book, as has been surmised, it was torn out and destroyed. But on his return to Yankee Harbor, Captain Palmer told the commodore and other captains what had occurred. After he returned home he also related his story to his family and friends. In later years, when he was in command of the clipper Howqua, in Hong Kong, China, he was invited to tell the story to Admiral Sir John Francis Austin, at the American consulate: for the admiral had observed that the arm-chair geographers of Europe were disposed to ignore Palmer's exploration and with a sailor's love of fair play he asked the captain for the facts in the case.

The various accounts which the captain thus gave were in several instances written down by those who heard them. Consul Frederick T. Bush, of Hong Kong, wrote what he heard, and his version was later printed in a New London paper. Edmund Fanning wrote the story as he gathered it from Commodore Pendleton after the expedition returned home. When, beginning in 1828, an effort was made to induce Congress to send a naval explor-

ing expedition to the far South and the Pacific (an effort which eventually resulted in the Wilkes expedition), Mr. J. N. Reynolds, an active promoter of the movement, gathered and wrote an account which he used in his propaganda. This one was printed in the Army and Naval Chronicle, Vol. III. Another account appeared in the North American Review in 1834. Each of these versions inevitably contains some statements not found in the others, and the whole have therefore been combined here to give the story in as full detail as possible.

When describing his adventure to Admiral Austin

the captain said:

"I pointed the bow of the little craft to south'ard and with her wings spread, the mainsail abeam, and the jib abreast (on) the opposite bow, she speeded on her way like a thing of life and light. With her flowing sheet she seemed to enter into the spirit which possessed my ambitions, and flew along until she brought me into the sight of land not laid down on my chart."

The tops of two mountains were first seen, and then lower land, trending away in both directions, appeared as the *Hero* drew near. The highest peak, named Mount Hope by explorer Wilkes, was in latitude 63° 25' S and longitude 57° 55' west. It was a rugged, verdureless land, with bare rocks and glaciers mingled everywhere within view—a most desolate region, and yet, as seen when the sun was

shining, with the green waters along shore dotted with gleaming ice cakes, and with the air filled with thousands of gray and black petrels and white cape pigeons, it was strikingly beautiful.

Fanning's account of what Palmer thus observed

is as follows:

"He found it to be an extensive mountainous country, more sterile and dismal, if possible, and more heavily loaded with ice and snow than the South Shetlands; there were sea leopards on its shore but no fur seals; the main part of the coast was icebound, although it was in the midsummer of this hemisphere, and a landing consequently difficult."

So far as the weather was concerned the young Captain had much better fortune than he had any reason to expect; but the fogs were frequently so thick that he was obliged to lay to at midday and wait until they thinned away lest he strike the ice or a reef. And it was because of the prevailing fog that he had one of the most startling experiences recorded in the histories of the explorers.

The Hero, in her return, had left Mount Hope on the north point of the mainland astern, late one afternoon, when a fog, so dense that the man at the tiller could not see the man on lookout at the bow, shut her in. She was then hove to in the usual course—the sails were arranged so that she would make as little headway as possible—and then all

hands settled down with such patience as they could summon, to await the coming of the next day. Although the breeze was light and the sloop drifted but slowly before it, the captain and his mate (Mr. Phineas Wilcox) kept vigilant watch all night for a change in the weather as well as for rocks and ice. The men (there were six before the mast) were placed on lookout at the bow and waist while the officers paced the quarterdeck.

At 12 o'clock that night Captain Nat came on deck to relieve Mate Wilcox. The captain paced the deck, as all ship officers do when on watch at night, until 12.30 when he struck the sloop's bell a single tap. It was a part of the regular routine which had been followed ever since Stonington had been left astern.

been left astern.

But when the sound of the ball rang through the fog, an answering stroke was heard off one bow with a second one off the opposite quarter.

"The response startled me," said the Captain, when relating the story in Hong Kong, "but I soon resumed my pace, turned my thoughts homeward and applied myself to building castles in the air," until one o'clock. Then he "struck two bells that were answered" as before.

"I could not credit my ears," declared the Captain. "I thought I was dreaming," because, "save for the screeching of the penguins, the albatrosses, the pigeons and the Mother Cary chickens, I was

sure no living object was within leagues of the

sloop."

The sailors, being more superstitious, believed the sounds were of supernatural origin, and even Mate Wilcox expressed the same idea when he declared the sounds were "tricky." To the sailors the sounds were not a little fearsome and to all very mystifying.

At 3.30 o'clock the mate came on deck and asserted that he heard human voices. A little later the fog suddenly cleared away, when the mystery was solved; for a fine frigate was seen off the sloop's starboard bow, a sloop of war off the port quarter, and a ship's cutter, full-manned and under the command of an officer in uniform, was soon seen coming to the *Hero*.

Meantime Captain Palmer made haste to hoist the Stars and Stripes, and the two warships then

displayed the Russian flag.

When the cutter arrived beside the sloop the officer in command stepped on deck and explained how it happened he had come. The two warships, he said, had been sent out by the Czar of Russia to explore the seas of the far South; and while sailing to the westward they had been compelled by the fog to lie to. The bell of the sloop had been heard on the warships and when the fog had lifted the cutter had been ordered to learn what vessel it was from which the sound had come. The com-

manding officer, Capt. F. G. von Bellingshausen, he continued, presented his compliments and begged the pleasure of meeting the captain of the sloop in the cabin of His Imperial Majesty's frigate Rostock.

"I assented," said Captain Palmer, in his Hong Kong narrative of the incident. "I at once entered the boat, was laid alongside, mounted to the deck, and I was ushered into the presence of the venerable commander."

The scene as that young Yankee captain entered the cabin of the frigate might well be reproduced by an artist of talent. For the captain of the frigate was seated at a table with a group of his officers, all in brilliant uniform, around him, while the young sealer, smooth-faced, tall and slender, was dressed in a seal-skin coat and boots of his own make, and he had a sou'wester on his head. To the naval officers the boy certainly was a bizarre figure. But when they looked into his far-seeing eyes they perceived that he was unabashed and fully able to meet them as man to man.

The captain of the frigate (he was made an admiral on his return home and is so called in the various narratives of this incident) arose to greet Captain Palmer, shook his hand, ordered a chair placed for him and then said:

"You are welcome, young man. Be seated."

The conversation which followed was as follows, so far as remembered:

"What is your name?"

"Nathaniel Palmer."

"Where you are from?"

"Stonington, Connecticut, U. S. A."

"The name of your boat?"

"Hero."

"What are you doing here?"

"On a sealing expedition. A fleet from Stonington is at work among the islands, here."

"What islands are those in sight?"

"The South Shetlands; and if you wish to visit any of them in particular it will afford me pleasure to be your pilot; for I am well acquainted with them."

He also mentioned the harbor where the sealing vessels were at anchor and added that water with an abundant supply of wildfowl might be obtained anywhere among the islands.

"I thank you," continued the captain, "but previous to our being enveloped in the fog we had a glimpse of those islands, and concluded we had made a discovery; but behold, when the fog lifts, to my great surprise, here is an American vessel, apparently in as fine order as if it were but yesterday she had left the United States; not only this but her master is ready to pilot my ships into port, where several of his own nation lie at anchor. We must surrender the palm of enterprise to you Americans, and content ourselves with following in your train."

"You flatter me," replied the captain, "but there is an immense extent of land still further south; and when the fog there is entirely dissipated you may have a full view of it from your masthead."

"How far south have you been?" asked the

captain.

Captain Palmer told him the latitude and longitude of the point at which the *Hero* turned back and described the coast along which she had sailed.

"Indeed!" exclaimed the Russian. "Then I am

entirely anticipated in my object."

He now arose much agitated and begged Captain Palmer to produce the *Hero's* log book and chart. Palmer at once sent to the sloop for them. While waiting for the messenger to return, breakfast was served, with Palmer seated at the side of the Russian captain. While they were at the table many questions were asked about the seal fishery, the ports of the South Shetlands, the hailing port of the sealing fleet and about the character of the vessels themselves.

The Hero's log and chart arrived while the two were yet at the table, and were placed before the Russian captain. For a time he examined them without saying anything. Then he arose from the table and exclaimed.

"What do I see and what do I hear from a boy in his teens? That he is commander of a tiny boat of the size of the launch of my frigate, in which he has pushed his way to the pole through storm and ice; has sought and found the point I, in command of one of the best appointed fleets at the disposal of my august master, have for three long weary years searched day and night for."

Then, placing his hand on Palmer's head he

continued:

"What shall I say to my master? What will he think of me? But be that as it may, my grief is your joy. Wear your laurels with my sincere prayers for your welfare. I name the land you have discovered in honor of yourself, noble boy, Palmer Land."

CHAPTER VII

EUROPEAN EXPLORERS AMONG THE SHETLANDS

N this search for new seal rookeries upon the shore of the Antarctic Continent, Captain Palmer had first crossed a space of open sea that is seventy miles wide. This brought him to a northerly extension of the continent on which is located the volcano Mount Hope, visible from Deception Island. When there he found the trend of the land was, as said, to the southwest and he therefore headed in that direction, keeping near the beach so that he could see the seals if any were to be found there. Bays, fiords and islands were observed along the way, and each was carefully examined for fur. Numbers of the leopard seal were seen but none of any other variety. As soon as he had determined that a beach carried no fur seals, Captain Palmer sailed on without giving any attention to any other feature of it. He was aware that he was coasting land never visited by man before, but he did not know it was of continental dimensions. In fact, the dimensions of the lands he discovered were not definitely or even approximately learned until it had been explored by Larsen, in 1893; Nordenskjold in 1903 and Charcot in 1910.

To the young captain the land seemed simply an unexplored island of large size, or perhaps a group of islands, connected by ice, and so it was supposed to be while he lived. Because he was looking for seal rookeries and nothing else, the land had no further interest after he learned that no seals resorted to the beaches.

As his cruise is now recalled, one is prone to imagine that he should have made a careful survey of the coast line simply because it had never been seen by human beings before. But the fact is there was no inducement impelling him to do so. For the mere discovery of unexplored islands was then such an ordinary experience among American sailors of the sail that little attention was given to any new coast unless it afforded a prospect for profitable exploitation. It is literally true that sighting new islands in the Pacific was a common experience among American whalers. Captain William Smith, who rediscovered the islands first seen by Dirk Gherritz, was knighted, but if every Yankee skipper who discovered an island theretofore unknown had been thus rewarded the American corps of knights would have far exceeded the English in number; for hundreds of islands, including atols, were found and charted by the whalers of that period. The coasting of the Antarctic Continent was really less interesting to the crew of the Hero than their previous cruise among the Shetlands had been, because in the Shetlands several rookeries were found. For

these men were all sealers and not surveyors or scientists.

Having cruised for at least 150 miles along the new land—the longitude attained was 68 degrees south—Captain Palmer came to impenetrable ice and turned back. The weather was fairly favorable—no worse than that experienced among the Shetlands. To Captain Palmer it did not seem as dangerous as it really was. The fact that he had sailed more than 200 miles from his friends in Yankee Harbor, and that any disaster to the sloop when far away would have left him and his crew to perish miserably did not impress him.

In his work on exploration in the far South, entitled "Antarctica," Edwin Swift Balch writes as follows (p. 94), about the work of Captain

Palmer:

"The account by Fanning of Palmer's first two voyages and the chart and memoir of 1822 of George Powell make it fairly certain:—I, that Palmer was probably the discoverer and certainly the first explorer of the lands lying south of Bransfield Strait and extending for some two hundred and fifty kilometers between about 57° 50′ and 62° 20′ west longitude, that is, of the northern coasts of West Antarctica from Liege Island to Joinville Island both inclusive:—2, that Palmer discovered the northern end of Gerlache Strait, which he recognized was a strait and not a bay as subsequently

charted:—3, that Palmer discovered the strait or bay since called Orleans Channel:—4, that Palmer recognized that these lands were perhaps a chain of islands:—5, that this coast or these islands were christened Palmer Land and that they were so first charted in England, France and America."

A copy of Powell's Chart is printed in connection with this quotation. The title of the chart is: "Chart of South Shetland, including Coronation Island, &c., from the Exploration of the Sloop *Dove* in the years 1821 and 1822. George Powell, Commander of the same. Published by R. H. Laurie, Chart Seller to the Admiralty, &c., &c., No. 53 Fleet Street, London, Nov'r 1st, 1822." A memoir, written by Powell, accompanied the chart. In this Captain Powell said (quoted by Balch):

"Of the land to the southward, called Palmer Land, very little can be said, as it does not appear to be sufficiently explored; but it has been described as very high and covered with snow, with inlets forming straits which may probably separate the land, and constitute a range of islands similar to those of South Shetland; at least, such is the appearance of the northern side, which alone has been explored."

Powell's chart is of special interest here because in later years Palmer's work as an explorer was either wholly ignored by British geographers or it was discredited. For example Findlay's "Sailing Directions" for the South Atlantic (issued in 1883), a standard work for the use of shipmasters, gives several pages to descriptions of the South Shetlands and the adjacent coast, but makes no mention of Palmer or Palmer Land. He does mention the American sealers, however—as follows:

"Several United States vessels have visited South Shetland, and an American account states that some of the harbours are very good, vessels in them being landlocked. . . . Capt. Dan W. Clark, of the ship *Hersilia* (an American), reported that he penetrated to the 66th degree of latitude, where he observed lands stretching further to the south, the extremities of which he could not ascertain."

If this quotation is considered in connection with the actual explorations of the region made by the men from Stonington, the extent of Findlay's knowledge of the region will be fully comprehended.

To illustrate still further the former attitude of the British geographers it seems advisable to quote an essay on Antarctic exploration which was written by Major General A. W. Greely for the *American* Geographic Magazine (March, 1912), in which the following appeared:

"Dr. Hugh Robert Hill in his generally accurate and fair-minded 'Siege of the South Pole,' 1905, unfortunately follows the British attitude of indirectly discrediting Palmer's story as to the Russian admiral, saying (page 100), 'It seems strange that if informed of the whereabouts of Palmer Land, he (Bellingshausen) made no reference to that fact in his own book.'

"However, Dr. Heinryk Arctowski, a Belgian professor, a Russian scholar, and an Antarctic explorer and expert, supports Palmer by a citation. In 'The Antarctic Voyage of the Belgica' (in the Geographical Journal, 1901, 18:353-394), Arctowski states that 'this meeting [the meeting between Palmer and Bellingshausen] was also described by Bellingshausen himself, as can easily be seen by consulting the remarkable but little known work of that eminent Russian explorer."

Bellingshausen's work has appeared in Russian only. The title is: "Dwukratnya isiskania w' Jujnom Ledowitom Okeanje i plawanie wokrug swjeta, &c.; St. Petersburg, 1831." The account of the meeting with Captain Palmer appears in Volume 2, pages 261-264. (See Balch's "Antarctica.")

Greely adds that "it is to be regretted that Dr. Hill failed to verify" the quotation from Bellings-

hausen's work.

Greely also calls attention to the eleventh edition of the Encyclopedia Britannica which was "specially Americanized" in order to promote sales in the United States. He notes that "it admits in two lines that 'Nathaniel Brown Palmer discovered the mountainous archipelago which now bears his name.'

It then proceeds to give a column regarding John Biscoe."

Palmer's discovery of the land came to be ignored and discredited, later, because of two explorations made by the British—one by Commander Henry Foster, R. N., of the sloop of war *Chanticleer*, and the other by Captain John Biscoe, who had been a master in the navy but was in the employ of London merchants when he went to the South Shetlands.

Foster was the first of the two to go there. He had been detailed by the Admiralty to survey parts of the Cape Horn region. While at anchor off Port Hatches, Staten Island, in a bad seaway, he was seen by Captain Alexander Palmer (brother of Captain Nat), and piloted to a safe anchorage inside; for Captain Alexander was sealing there at the time.

As Captain Foster and Captain Alex were both of an adventurous disposition they soon became friends, in spite of the natural attitude of naval officers toward fishermen. Captain Alex guided Foster to various heights of land from which good views of the coasts and the islands off shore were to be seen, and he fully described the waters as he had learned them while working the beaches for furs. Further than that, he told Captain Foster all about the South Shetlands and especially about Yankee Harbor as a port of refuge. Captain Foster was thus greatly aided, of course, when he

went, later, to that harbor to make a survey of the archipelago.

Before leaving, Captain Foster wrote the following letter of acknowledgement which is still pre-

served among the records at Stonington:

"These are to certify [by] the principal officers and commissioners of his Majesty's Navy that Mr. Alexander S. Palmer, master of the American sealing schooner the *Penguin*, pilotted His Majesty's sloop under my command, from her anchorage off Dead Man's Island (Staten Island), the 26th day of October, 1828, to the harbour of North Port Hatchet (Staten Island), where he this day left her moored in perfect safety. Given under my hand on board His Majesty's sloop *Chanticleer*, at North Port Hatchet, Staten Island, the 28th day of October, 1828.

"Henry Foster, Commander."

From Captain Alexander Palmer, Commander Foster learned, as said, all that an intelligent and experienced sealer could tell him about the South Shetlands and the various harbors there. Following the directions given him, Commander Foster went in the *Chanticleer* to Yankee Harbor, where he set up various instruments on shore and made a considerable survey of the entire region, including a part of Palmer Land.

The surgeon of the *Chanticleer*, Dr. W. H. R. Webster, wrote an account of the work done in a

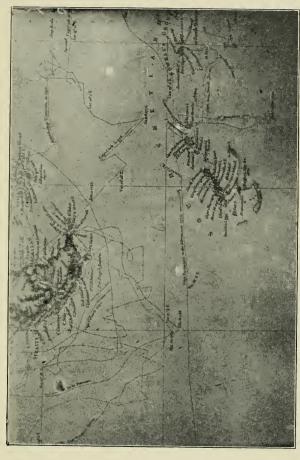
book entitled, "Narrative of a Voyage," &c., in which he mentions the help received from Captain Alexander Palmer, but not a word is said by him, or in Foster's report to the Admiralty, about the explorations made by Captain Nathaniel Brown Palmer.* The chart made by Foster renames Palmer Land. But when Foster wrote a report of what he had done there, he omitted to give Captain Nat Palmer credit for exploring the coast of the continent and he did not use the name Palmer Land.

Later, two London ship owners, of whom one was an enthusiastic member of the Royal Geographic Society, sent a ship under the command of Captain John Biscoe, mentioned above, to make further explorations. Biscoe sailed southwesterly to latitude 67° 1' south, and longitude 71° 48' west of Greenwich. In his report he wrote that he had skirted "a chain of islands, extending E. N. E. and W. S. W., and fronting high continuous land."

Findlay's "Sailing Directions" says this chain of islands "is unquestionably the same which is marked in the old charts by the name of Gherritz Land, it having been discovered in 1599 by Dirk Gherritz."

That is to say, Biscoe reported the South Shetlands as a new discovery. Nevertheless the name which Biscoe gave to Palmer Land—he called it Graham Land—was used thereafter on English charts.

^{*} Foster was drowned in the Chagres River on his way home from the far South.



Weeks of Stonington, Conn. August 14, lames H. "From a chart in the possession of Dr.] Fleet Street, guished modern navigators. Chart of the World, on Laurie, No. 53, determinations.



As Greely says, all this matter is to be regretted. One may add that it is to be especially regretted that the publishers of the Encyclopædia supposed their two-line reference to Palmer would promote sales of their work among intelligent people in this country.

But if the British attitude be considered without prejudice it is found to be easily understandable. Note first that the two British surveyors of the region had had naval training; in connection with that fact recall the attitude of all British naval officers of that period toward their own merchant sailors as well as toward others. Their merchant captains, as Lindsay describes them in detail in Vol. III, Chap. 1, of his "History of Merchant Shipping," were, as a class, ignorant drunkards and generally detestable. Lindsay's showing is quite remarkable, and it fully explains the contempt which the officers of the Royal Navy felt for all merchant seamen—for of course they could not believe American merchantmen superior to their own.

Since Palmer was a sealer, and so was classed with the fishermen in the thoughts of both Foster and Biscoe, it is not a matter of great wonder that they entirely ignored him in their reports of their own surveys. It may seem a little remarkable that they should also have ignored Powell's chart of Palmer Land, but Powell was also a sealer—one of a contemptible class, in the naval view—and names bestowed on lands by such as he were not to

be respected by any British naval surveyor of that day!

Even the regrettable misstatement made by Dr. Mills should be overlooked because elsewhere in his book he says:

"As a matter of historic justice it seems to us that Powell's name of Palmer Land ought to be retained." (Quoted by Greely.)

In order that justice be done the memory of Captain Palmer it is of importance only that his work should be accurately described. This was the view of General Greely and it is that of all other Americans who have made a study of Antarctic exploration. To this General Greely, in the essay quoted above, added the following:

"Has not the time arrived when this glorious phase of American maritime history should receive full national recognition? Every textbook teaching polar geography should contain the statement that the American Captain, N. B. Palmer, first discovered parts of the continent of Antarctica, and on every official south-polar map should be replaced Palmer Land. . . . It is therefore the duty of the 120,000 members of the National Geographic Society to create a public sentiment that shall honor in our literature and in our history the achievements of Nathaniel B. Palmer and Charles Wilkes."

CHAPTER VIII

SUPERIOR WORK OF THE STONINGTON MEN

T was at 6 A. M., on January 28, that Captain Palmer arrived in Yankee Harbor, after his memorable cruise along the Antarctic Continent -an exploration of at least 150 miles of its coast line. What he did thereafter among the Shetlands is not recorded in the existing papers, but it is reasonable to suppose that he continued the work of carrying supplies to the camps of the sealers and bringing the skins taken there back to the fleet in Yankee Harbor. He also had the blubber of elephant seals to transport to the harbor; for a number of the men were engaged in killing those seals, the blubber of which was tried out in kettles set up on the beach in Yankee Harbor. The Hero, when ready to sail for home, was loaded with this oil. The day of departure for home was February 22, 1821, and the entry in the Hero's log, that day, was as follows:

"Thursday, 22d February

"Commences with fine breeze from west. At 10 P M got under weigh for sea in compay with Frederick, Express and Hersilia. At 11 were clear from the Harbor."

Two of these vessels were homeward bound, the Frederick and the Hero. The Hersilia soon stood away to the northwest, bound to "Isld St. Mary's in Pacific, hair sealing," and one may suppose that her crew were not a little homesick as they left the others astern. In fact, if they could have foreseen the fate that awaited them, they never would have gone to the coast of Chili. The Hersilia safely reached her destination and secured 15,000 skins of the hair seal—enough to yield a fine profit—but just when ready to depart for home the vessel was captured by a Spanish officer named Beneviades who commanded a force which was attempting to hold the Chilenos in subjection to the Spanish crown. The crew were made prisoners and all were compelled to serve the Spanish officers in menial capacities. Captain Sheffield and most of his crew finally escaped in whaleboats and went to Valparaiso. Commodore Sir T. M. Hardy, commanding the British naval squadron in those waters, at once sent a sloop of war,* with Captain Sheffield, to liberate the remainder of the sailors, and they were brought back; but the Hersilia and her cargo had been destroyed by the Spaniards during a battle with the Patriots, in which he was defeated.

The log of the *Hero* for the voyage homeward contains nothing of interest here until the entry of May 7, which reads:

^{*}The Conway, Captain Basil Hall. The story is told in considerable detail in Hall's "Chili, Peru and Mexico," Part I, Chapter 23.

"Commences with fresh gales from north. Pleasant. At 6 reefed the mainsail. At 7 sounded and got ground at 75, [figures indistinct] fathoms. Middle part with light rain. At 10 sounded. Got ground at 35 fathoms with soft [illegible] ooze which indicates being in Block Island channel. At 6 A M made the land. Stood in and at 10 tacked eastward. Were about 15 miles to the westward of Montaug Point. Ends with fair weather, light winds N by east. Employed in various jobs."

So runs the last entry in the *Hero's* log. It was a day of low visibility, as a naval officer might say, and the *Hero* was carried to the westward of Stonington, but she was anchored, safe at home, before supper time, beyond a doubt, after the most memorable cruise known to the history of the American merchant marine.

Of the financial results of the expedition to the South Shetlands a sufficient account is found in the records which may be quoted here in part. One faded memorandum contains the following (see p. 90).

The item of 1,207 skins credited to "boats" is of special interest, for one may suppose that these skins were taken from the outlying rocks by the crews of whaleboats in the manner already described. At least a hundred such landings must have been made by the sailors to secure that number. Rightly seen, that brief memorandum is a record of daring, endurance and persistence rarely if ever equaled.

"The Hero brought [from] camps on the beach and put on the different vessels the following Fur seal skins:

November 27, 1820. Sloop Hero from camp arrived with 465 Fur

skins prime skins.

Kills Princ skills.				
Decr 2d. Sloop from camp with [illegible]	616	prime	fur	skins.
Sloop arrived from camp Decr 5th with	906	- "	66	66
Decr oth sloop from camp with prime	9790	"	46	46
Decr 12th sloop from camp with	5616	"	"	66
Decr 16 sloop from camp with	6865	66	"	"
Decr 19 sloop from camp with	8229	**	"	"
Decr 30 " " " "	8000	"	66	33
Tany o. 1821 sloop from camp with	6TOT	44	"	66
" 12 " " " " " " " " " " " " " " " " " "	2800	66	66	66
	3			
_				
Δ.	19223			
	465			
Novr. 27, boats				

February 6, 1821, took on board brig Frederick, Capt. Ben., from Brig Hersilia, Capt. James Sheffield, 12,000 prime fur seal. The Hersilia is bound to isld St. Mary's in Pacific hair sealing."

The footings in the above column of figures are incorrect, as the reader may determine.

The total catch of the entire fleet of sealers at the South Shetlands during the season of 1820-1821 is set down in the records at 250,000. Of this number the American vessels are credited with 150,000, of which number the Stonington fleet secured 88,000. The Stonington vessels also carried home 1,500 barrels of elephant seal oil then worth \$10 a barrel. The price received for the skins is not given.

A little calculation shows that the 12 European sealers averaged 8,333 skins each and the 18 American vessels the same number. But the crews of the eight Stonington vessels, having taken 88,000,

their average was 11,000 each. It is reasonable to suppose that a considerable part of this superiority was due to the fact that populous rookeries were found by Captain Palmer in his first cruise among the islands.

CHAPTER IX

EXPLORING WITH THE SLOOP "JAMES MONROE"

AVING made large profits by their expedition of 1820-1821, the people of Stonington naturally fitted out still another one for the ensuing season. The vessels included the brigs Frederick and Alabama Packet, the schooners Express and Free Gift and the sloops James Monroe and Hero.

Two sloops were taken this time in order that one might serve the fleet continuously as a tender, while the other would be free to sail in search of new seal islands. For the explorations the *James Monroe*, a larger sloop than the *Hero*, was selected, and Captain Palmer was put in command.

The sailing orders issued to Captain Palmer, on this occasion, as well as the order under which he returned home from the South Shetlands, have been preserved and they are given here partly because they relate to the captain's work and partly because few documents of the kind are now to be found anywhere. The sailing orders read:

"Stonington, July 21, 1821.

"Capt. Nathaniel B. Palmer, Sir:

"You will proceed to sea with the sloop James Monroe the first favorable opportunity in company

with the brig Alabama Packet and make all despatch for East Harbor (if you get separated from the Alabama Packet) on the north side of Cape St. Johns in the Island of Statten Land. On your arrival at this East Harbour (which lays 2 or 3 miles from the end of Cape St. Johns on the north side of the cape) if you do not find Capt. Benjm. Pendleton or Capt. William A. Fanning there you will then (after taking in what wood and water you stand in need of if not joined by one of them), proceed with all despatch for Deception harbour in New South Iceland, where you will employ your crew in taking Elephant blubber and mincing and filling your casks with mixed blubber & procuring seal skins until you are joined by Capt. Pendleton or Fanning. It is expected you will use your best judgment to keep your crew in harmony and good spirits. Good usage and strict Discipline will best do this and enable you to procure a good voyage, or full cargo of skins and oil, which is our first object and wish, and we expect your best endeavor at all times to do this. You will consider yourself and crew and vessel mated with the brigs Frederick and Alabama Packet, schooners Express & Free Gift and sloop Hero, and you will share with them in proportion to the number of their and your crews, as Capt. Benjm Pendleton shall direct, and you will at all time consider yourself and vessel under his orders and directions, but in case of his inability or absence you will consider yourself & vessel under

the orders and direction of Capt. William A. Fanning, & govern your acts and proceedings accordingly, and as your vessel is fitted and sent out for the express purpose to act as a tender or shallop to the vessels of this concern, you will at all times consider the importance of arriving at Deception harbour by the time that the brigs Frederick and Alabama Packet does, and with this [blotted] recommend to you to use your best endeavors to keep in company and not get separated from the brig Alabama Packet in your passage out. You will be prudent and careful in the expenditure of your provisions & stores & do your best to obtain a good voyage.

"Wishing you health and prosperity, we are your

sincere friends

"E. Fanning Agents for the B. Pendleton Concern

"P. S.—If any inability occurs to Capt. Nathl B. Palmer then the next commanding officer will govern himself strictly by the above orders.

"E. Fanning Agents."

When ready to return home at the end of the season Captain Palmer received the following letter from Commodore Pendleton:

"Sir: "Shetland, Jany 25, 1822.

"You being ready you will proceed to sea and make all possible despatch for the port of Stoning-

ton, consistent with the safety of your vessel and cargo. Should necessity oblige you to stop I recommend [illegible] having as little communication with the main as possible; I wish you to bear in mind the importance of as little detention as your situation will admit of.

"Relying on your ability and active exertions to effect the speedy close of the part of our expedition intrusted to your charge, I am,

"Sir, yr. obt. Servt., Benjamin Pendleton.

"Capt. N. B. Palmer "Jas Monroe."

The order to have as little communication with the main as possible is of interest because at that time all the Spanish American colonies were in revolt and American vessels were harshly treated in South American ports, no matter which army was in possession; and that is a matter to receive further consideration in another chapter.

As soon as the sloop James Monroe arrived at Yankee Harbor she fitted out for an exploring expedition along the coast of the Antarctic Continent which Captain Palmer had visited the previous season. Commodore Pendleton hoped that in spite of the failure to find fur seals there in the former trip they might haul out there during this season. This hope proved vain, but it is interesting to note that, while all the other exploring expeditions to that region were made in large and well-found vessels

(the tender of the Wilkes expedition was of 100 tons burden and built with special framing for the purpose), the sealers nonchalantly used common coasters from Long Island Sound. While men thus risk their lives for any good purpose the evolution of the race is assured.

As in his previous trip along the continent, Captain Palmer carefully examined the bays and fiords and islands found there but he did not see a fur seal, and when in about the same latitude as before (68°) he was turned back by solid ice.

Having returned to Yankee Harbor, Captain Palmer was sent to the east and southeast to explore the continent still further. In this voyage a British sealer, the sloop *Dove*, Captain George Powell, sailed in company with the *James Monroe*. It seems worth while to emphasize the fact that these two sealers, Captain Palmer and Captain Powell, worked together in entire harmony. A small group of barren islands was discovered on December 6, 1821, lying between 60° 30′ and 60° 48′ south latitude and between 44° and 47° west longitude. The exact extent of the coast of the continent which the two explorers traced is not given in the records. No seals were found.

On the return of the two vessels to Yankee Harbor, Captain Powell suggested that, as the mainland (supposed to be an island), found the previous year, had been named for Captain Palmer, the islands discovered on the present voyage should be named Powell's Islands; and to this all the captains in the harbor agreed.

Captain Powell also told the other sealers that, on his return home to London, he purposed publishing a chart of the entire South Shetland region which the sealers had thus far explored, and asked for all the notes the others had made. To this the sealers all cordially agreed, of course. The facts thus obtained, added to what he had learned through his own observations, were combined in the chart previously mentioned.

The Stonington fleet was by no means successful in the harvest at the South Shetlands, during this season. The rookeries had been so badly depleted in the preceding year that only 1,500 skins were taken all told during this one. Accordingly, in order to make a profit in spite of this failure, the two brigs and the sloop Hero went to the coasts of Peru and Chili for skins of the hair seal. Captain Alexander Palmer, a brother of Captain Nat, sailed on this expedition as a boy on the Alabama Packet. A memorandum left by him says that the crews of the three vessels which went to the coast of Chili took 27,000 skins at St. Mary's and Mocha Islands. These the Frederick carried home, after which the Alabama Packet and the Hero crews took 25,000 more. The little fleet also secured 1,500 barrels of elephant seal oil. The Hero was then sold at

Coquimbo. The Alabama Packet arrived at Stonington in a few days less than two years from the day she left that port. On the whole the Stonington venture had been profitable, even though few furs were secured.

CHAPTER X

CARRYING SUPPLIES TO BOLIVAR

o say to a reader who knows nothing about the conditions then prevailing at sea, that Captain Palmer, after his return in 1822 from the Shetland Islands, made a voyage from New Haven to St. Bartholomew, in the West Indies, and back, in a little less than a month, does not convey any very startling information. But if it were said to one familiar with the history of the region, the reply might well be:

"Short voyage, that, but you couldn't blame him

for carrying on."

"Carrying on" certainly was needful when voyages were made to any part of the West Indies, or to the Spanish American coast, in those days. During all the years in which Americans had had a merchant marine, speed had been necessary if losses were to be avoided. Ships had always carried cannon when bound on oversea voyages. For the wars of Europe had always involved the Americans, and European privateers, most of whom were little or no better than pirates, had always considered American ships good prizes. To escape them it was always necessary to run or fight.

In 1822, even though the War of 1812 had taught European naval people that Yankee sailors were first class fighting men, the American ships were continuously harassed in all West India waters because the revolt of the Spanish American colonies had created a condition of anarchy throughout that region. Many armed ships, from American ports as well as from European, had been sent ostensibly to join the revolutionists in their fight against Spain. Some of the ablest captains who had commanded privateers in the War of 1812 had thus gone to the aid of the Spanish-Americans. But while they asserted their object was to fight for universal freedom, they were really actuated by a desire to plunder Spanish shipping. Going to any Spanish-American port which was in the control of revolutionists, they secured commissions as privateers.

Sailing thence they searched the West India waters for Spanish ships, they went to the coasts of Spain with a similar intent and they even sailed as far as Manila. But while a few were enormously successful the many failed to find any Spanish ship worth the trouble of looting.

Now the crews of these unlucky privateers were engaged under a contract by which they were to receive a share of the plunder in lieu of wages—no plunder, no wages. And the members of the crews were commonly men of long experience in privateering or of no experience whatever. The old hands, having been plundering ships for years,

had no scruples about doing deeds of outright piracy—and the officers of those vessels were the most experienced and the most greedy men on board. Lacking lawful plunder the Spanish-American pirates took such plunder as came to hand, regardless of the flag involved.

When Captain Palmer made his short voyage to St. Bartholomew, in 1822, there were many of these piratical cruisers afloat among the West Indies. There were also pirates under the Spanish flag searching for American merchantmen. Having a navy that was in every way inefficient, the Spaniards had thought to curb the cruisers under Spanish-American flags by declaring a blockade of all Spanish-American ports—a paper blockade, so called because they were unable to enforce it. They then commissioned armed vessels to go in search of any ships bound to or from any of the ports upon which a blockade had been declared. The crews of these Spanish privateers were of the same character as those under the patriot flags—pirates all.

The "Naval Affairs" volumes of the "American State Papers" contain scores of documents relating to the pirates of both classes. On page 814, of Volume I, for example, is a list of six of the Spanish privateers that were fitted out at Porto Rican ports. One, named *Pancheta*, was "an hermaphrodite brig, pierced for sixteen guns, carries ten or twelve; has a complement of 120 men."

In another document (p. 787) is the following under date of March 2, 1822:

"The extent to which the system of plunder upon the ocean is carried on in the West India seas and Gulf of Mexico, is truly alarming. . . . Some fresh instance of the atrocity with which the pirates carry on their depredations, accompanied, too, by the indiscriminate massacre of the defenceless, is brought by almost every mail. . . . The committee of the House of Representatives are induced to believe that this system of piracy is now spreading itself to a vast extent, attracting to it the idle, vicious and desperate of all nations."

In proof that the system was thus spreading is a statement in a document dated December 2, 1824, which appears on page 22 of Volume II, as follows:

"Whole crews have been recently murdered, their vessels burnt and their cargoes plundered and in some instances openly sold at the Matanzas or the Havana."

Other documents give details of the assaults upon merchant crews which make painful reading; for not only were these seamen cut to pieces with knives but they were confined under hatches and the ships were then fired, so that the crews were burned to death.

It was while such conditions as these documents

described were prevailing in the West Indies that young Captain Palmer left the sealing business and took command of a small merchantman bound to St. Bartholomew. It was a voyage during which he was fully justified in carrying sail to the limit, but when the young captain recalled it in later years the danger, if it were realized while on the route, was entirely forgotten. At any rate when the captain mentioned this voyage it was only to tell what he considered a good joke upon himself. A letter written A. A. Low, the New York tea merchant, in 1875, a copy of which is among the papers at Stonington, gives the facts. It says that after the sloop James Monroe returned from her voyage to the South Shetlands and the Antarctic Continent, she was sold at auction at Stonington. A New Haven ship merchant named Henry Trowbridge bought her for use in the West India trade as a "sheep jockey," to use the term applied to such vessels, and Palmer was hired to take command. The letter continues:

"I took the sloop to New Haven and put her in condition for the voyage. She was loaded with everything you can think of below. Even the cabin was filled, leaving one length of berths for the mate and myself. The deck was filled with sheep, 175 in number. On top of [above] the sheep [the] deck was fitted with coops of fowls and provender—a hard-looking sloop, I assure you, when ready for sea. We sailed and in 12 days arrived at our port,

a long time in advance of vessels that had sailed before us. Sold our cargo, half loaded our sloop with sugar and arrived back at New Haven in 29 days from day of our departure.

"I had enough of New Haven Sheep Jockeys and demanded my discharge, after entering the vessel. Nothing had been said about wages. I called on Mr. Trowbridge for settlement—a pompous, fat old fellow. He said:

"'Captain, what do you think the wages should

be?

"'What you think is right.'

"'Well,' he said, 'I think as you have made the voyage in 29 days, I think thirty silver dollars is about a fair thing. I do not think it good policy for a young man to have too much money. They are very apt to make a bad use of it."

Most of the ship owners of that day were constantly on the lookout for seamen who could make swift passages, and the 29-day voyage to St. Bartholomew led Captain Palmer to the command of a schooner named Cadet which was in the trade to the Spanish Main. It was, of course, a much more dangerous trade than that to St. Bartholomew. For not only was the captain obliged to run the risk of meeting all the varieties of pirates in the West Indies, but he was subjected to the whims of both the South American Patriots and the Spanish officials who were fighting to maintain the power of Spain.

Only one letter and a few notes made by friends remain to tell the story of the two voyages made in the Cadet, but it appears that she was the property of Baldwin & Spooner, of New York, and that both voyages were made to Carthagena, where Bolivar was in command. It is therefore reasonable to suppose that the cargo consisted of arms, ammunition, medicines and other supplies which an army in the field would need. There was some trouble with the consignee in the first voyage, the character of which is not given, but it is plainly shown that Captain Palmer handled the matter to the satisfaction of the owners. In the second voyage the cargo was delivered in good order on February 25, 1824; but when the captain would have sailed for home he was compelled to carry a detachment of the Patriot army to the port of Chagres, at the mouth of the river that gave the canal builders on the Isthmus of Panama so much trouble.

Blunt's "American Coast Pilot," issued in 1847, quotes Capt. G. Sidney Smith, H. H. Sloop *Bustard*, as follows, regarding the dangers of Chagres:

"I would not recommend its being entered, if the measure could possibly be avoided, or to suffer the boats to be there at night. It is perhaps, the most unhealthy place known. The Bustard's cutter was by stress of weather, obliged to pass a night in the harbor; the consequent loss was a lieutenant and seven men; only one of the number attacked recovered. This happened between the 27th and 30th day of November, 1827."

In spite of the deadly character of the port, Captain Palmer was detained there for a month. Of course he suffered from an attack of the fever for which the port was notorious, but the strength of mind and body which had been developed in him during eleven years of life as a sailor, and especially during his life as a sealer, carried him safely through. However, he lost his hair and when it grew in again it had changed from the light color which had characterized it theretofore to a dark chestnut.

Up to this time Captain Palmer had been a big boy in appearance. Now, as health returned, he became a notable figure physically, and he developed the commanding presence which made him every inch a master whenever he appeared upon a ship's deck, whether his own or another's.

After Captain Palmer recovered from the attack of Chagres fever far enough to be able to go to sea, he chartered the *Cadet* to carry Spaniards—prisoners whom Bolivar had captured—to Santiago de Cuba. And this purpose was accomplished to the entire satisfaction of Bolivar, of the Spaniards, and of the owners of the *Cadet*.

Though so few details of either of the voyages from New York remain on record, it will help the reader to appreciate the character of the captain to restate what he did during the two voyages to Carthagena.

Though but twenty-three years old he was trusted to carry a cargo that was contraband of war, to the insurgent chief at Carthagena. On his passage out he had to risk meeting pirates of all classes, any one of whom would have found the Cadet's cargo most valuable. At Carthagena he had to deal not only with Bolivar but with a number of subordinate officers who were at once proud, povertystricken and, in cases, not too scrupulous in their methods of securing the supplies they wanted. With these, Palmer had to settle the accounts of the schooner; from them he had to get the price of the goods he had brought, and he did it. When transporting the insurgent troops to Chagres, he certainly had a turbulent mass of humanity to deal with. And, finally, when he carried the Spaniards to the Spanish port of Santiago, in Cuba, he had a still more sensitive class to deal with. Moreover, he arrived at his destination under the odium of having been in the employ of the insurgents-traitors, in the Spanish view—and was therefore obliged to deal with the Santiago officials under a heavy handicap. But difficult as was his work he accomplished it all, as said, to the entire satisfaction

of the insurgents, the Spaniards and the owners of the schooner.

When a Spaniard wishes to compliment his friends he commonly says they are muy simpatico. Literally translated the words mean "very sympathetic"; but as used by the Spanish American they imply full understanding as well as entire sympathy. All the Spanish-speaking people, with whom Captain Palmer came in contact during those voyages in the Cadet, found him muy simpatico. And entire sympathy with full understanding bound a great host of friends to him throughout his life.

After leaving Santiago, homeward bound, the Cadet had to sail through the pirate-infested waters along the south coast of Cuba; for the sailing route was to the west along that coast to Cape San Antonio and thence easterly with the Gulf Stream. The cape was then and for years thereafter the lurking place of pirates, for the reason that so many vessels bound north passed that way.

However, Captain Palmer met no pirates in those waters, but an experience of that kind came later off the west coast of South America under remarkable circumstances. The second voyage to Carthagena ended disastrously because the *Cadet* was driven ashore on the Jersey coast, near Long Branch. What the prevailing storm conditions were is not a matter of record, but it is said that Captain Nat's brother, Alexander, was a member of the *Cadet's* crew (mate) and when she stranded he and

another sailor launched a small boat to carry a line to the beach. The surf rolled the boat over in spite of the skilled efforts of the experienced young sealer who was handling her, but he and the sailor made their way ashore and they carried the line, at that. So all hands were saved, but the vessel was a total loss.

Of all the misfortunes that come to a young captain none is greater than the loss of a ship. For unless he can prove clearly that he was in no way to blame, the underwriters blacklist him and other owners become in like manner ill-disposed toward him. There is then nothing for him to do but begin over again, and he is lucky to get a berth as second mate. But Captain Nat was now placed in command of the brig *Tampico* and sent once more on a voyage to Carthagena. In spite of shipwreck as well as in spite of supersensitive consignees, the young captain made his way. A fourth voyage to Carthagena was made in 1826, and after returning home from this one he was married.

It used to be said of any young sailor that he had a sweetheart in every port. Captain Nat had one sweetheart only and she lived in Stonington—Miss Eliza T., the daughter of Paul Babcock. The two were married on December 7, 1826. Mrs. Palmer's brother David was a famous clipper captain and, later, President of the Pacific Mail Steamship Company.

The career of the young captain during the next

few years was typical of young American seamen of the day. He made seven voyages in the Tampico with his brother Alexander as mate. In some of these he went to Europe. It appears from notes made by a member of the family that he eventually became owner of this vessel and that he sold her in 1828 for \$5,300, a fact that shows he was accumulating wealth. A part of this money was invested in a new schooner which was put into the trade between New Orleans and Vera Cruz, Mexico. He had traded to Mobile, as well as to New Orleans.

In the meantime sufficient reasons for sending another exploring expedition to the Antarctic waters had been under consideration by the public-especially alongshore—and young Captain Palmer became a leader in the enterprise under circumstances of so much interest that a special chapter may be given to the matter.

CHAPTER XI

ANOTHER MEMORABLE EXPLORING EXPEDITION

HE story of the voyage which Captain Nathaniel Brown Palmer made to the Antarctic region in 1829-1830, if considered as a chapter in the history of the American merchant marine, is of little less interest than that of his voyage during which he discovered the Antarctic Continent.

To show the captain's standing in this expedition, and more especially his mental attitude toward the work, it is necessary to describe rather fully the peculiar circumstances which led up to the venture. A perusal of the periodicals of the day shows that after Captain Palmer discovered the Antarctic Continent, and after the story of his interview with Captain Bellingshausen, of the Russian exploring expedition, had been told alongshore, the whalers and sealers of the New England coast began to talk about the advisability of sending a national [naval] expedition to survey the unvisited waters of the far South and those of the Pacific—to do such work as that which the Russians had been doing. That is to say the expedition should, they said:

"(1) Search for lands which passing ships had reported in far southern seas, the location of which, however, was not definitely known.

"(2) Locate definitely some hundreds of islands which had been discovered by strolling whalers in

various parts of the Pacific.

"(3) Search for lands in unvisited waters."

The sealers of Stonington were especially interested in an island which Capt. James C. Swain, of the whaler Alliance, of Newport, R. I., said he had seen, or which he thought he saw, while on his way home from the Pacific with 2,300 barrels of sperm oil. When on his way to round the Horn he passed much further south than usual, and in latitude 59° south and longitude 90° west, "discovered an island . . . covered with snow and abounding with seadogs and fowl." So runs the record. The date of the discovery is not given but the Alliance arrived home on May 21, 1824.

Capt. Richard Macy, of Nantucket, "a very intelligent man," who had "long been engaged in the whale fishery," and had "shown more than usual skill in his observations . . . discovered an island four or five miles in extent, in south latitude 59° and west longitude 91°, his ship passing near enough to see the breakers. The island abounded with seadogs, or seals, and the water was much colored and thick with rockweed."

This observation was made on the way to the

Pacific. When coming home from this voyage (he reached Nantucket on April 17, 1825), Macy sailed far south once more, reaching the 55th parallel, and at a point of which the longitude is not given he "found the water much colored, abounding with rockweed and seals."

The above facts and quoted statements are taken from Volume IV of the "Naval Affairs" of the "American State Papers" series, pages 695-698, and from Starbuck's "History of American Whaling," pages 243 and 246. The location of the island, as thus described, seems sufficiently definite to warrant a search. Apparently any ship master should have been able to confirm the discoveries with little difficulty. But references to discoveries, found elsewhere in the record quoted, show that both of those whalers saw, or thought they saw, the islands after they had been sailing by dead reckoning for several days. Cloudy weather prevented their verifying the locations by observations of the sun or any other heavenly body.

It is also to be noted here that the "Naval Affairs" volume quoted, says that even the observations of the sun, as made by the whalers under favorable conditions, were not trustworthy. Their chronometers were commonly out of time and they used poor instruments in a careless manner.

The two reports of islands upon which many "seadogs" were seen by passing ships, aroused keen interest at Stonington, which was then the principal port of the sealers. The whalers of Nantucket were almost as deeply interested, however, and the matter was fully discussed by seafaring people all along the coast. At the same time the many islands that had been reported from various parts of the Pacific were considered. For all of these islands, and more especially the low-lying coral reefs, were deadly sources of peril to all shipping as long as their exact locations had not been charted.

The call for a naval exploring expedition which arose in consequence of these reports was entirely new in America, and may receive further consideration. In every newspaper discussion of the call the fact that the British were active in making such explorations was mentioned. The fact that the Russians, who had no financial interests in the Antarctic seas, had sent two warships there, was referred to. More important still was the insistence upon the humiliating fact that American seamen were absolutely dependent upon charts provided by British surveyors whenever a deep-water voyage was to be made. However loudly the Yankee sailor might boast of the superiority of his ship over all others, the British sailor always came back with a quiet query as to where that ship got her charts.

Granting that the sealers and the whalers had a financial interest in a naval exploring expedition, it is yet certain that they were also animated by a feeling of patriotic indignation over the supine attitude of Congress in the matter.

In the "Naval Affairs" volumes quoted many of the great folio pages are covered with letters and memorials on the subject of a naval exploring expedition, all of which show a growing interest in the subject. An energetic young Yankee named I. N. Reynolds was a leader in the efforts to move Congress. Captain Edmund Fanning, the Stonington capitalist who had made a fortune taking seals in the Cape Horn region, was an equally influential worker. His "Voyages Round the World," which is yet an interesting volume of explorations, was written when public discussion of the matter was at its height. In connection with the propaganda of the two men mentioned it is noted in the "Naval Affairs" volumes that memorials were presented to Congress, in 1827-1829, which were signed by Gov. James Iredell, of North Carolina, and by Lieut. Gov. Erastus Root, of New York. The House of Delegates, in Maryland, passed a resolution favoring the project. Hon. Linn Banks, Speaker of the House of Delegates, in Virginia, and "a large and very respectable number of the members of the Legislature" also signed a memorial on the subject.

In short, public interest was aroused to a point so high that "on May 21, 1828, the House of Representatives passed a resolution requesting the President of the United States" to send "one of our small naval vessels to the Pacific Ocean and the South Sea to examine the coasts, islands, harbors, shoals and reefs in those seas, and to ascertain their true location and description." The resolution authorized "the use of such facilities as could be afforded by the [Navy] Department without further appropriation during the year."

In a letter written by Secretary of the Navy Samuel Southard, on May 23, 1828, he said, "there was no vessel belonging to our navy which in its then condition was proper to send upon this expedition." However, the sloop-of-war Peacock was ordered to the Brooklyn Navy yard to be properly fitted for such a survey, and Master Commandant Thomas ap Catesby Jones was placed in command of her. Mr. J. N. Reynolds was appointed an agent of the Navy Department to assist in providing the outfit. It was then decided to send along a commercial expert, an astronomer, "a naturalist with one or two assistants, and a historiographer."

Then "a second vessel was conditionally purchased at an agreed price of \$10,000" to serve as "a provision ship." This vessel was the brig Seraph, owned and commanded by Captain Benjamin Pendleton, of Stonington, the man who had been commodore of the Stonington sealing fleet in the expeditions of 1820-1822. Pendleton had already loaded the Seraph with a cargo for Malaga, when he was approached with an invitation to go with the explorers, but he was persuaded to discharge the cargo and fit out for the Antarctic. In the view of Secretary of the Navy Southard, Pendleton's experience in Antarctic waters made his presence in the

expedition imperative.

In the meantime Lieut. Charles Wilkes was selected to go as astronomer to the expedition, and Southard ordered him to provide all the instruments which would be needed for making accurate surveys on the coasts to be explored. On this order Wilkes purchased instruments to the value of \$1,167.50 for which he paid with his own money, and he also bought others to the value of \$3,248 for which he promised to pay.

In due time the Peacock and the Seraph were fitted for the expedition and the force of scientists was organized and held awaiting orders to join the ships. An application was then made to Congress for a small appropriation with which to pay

the running expenses of the expedition.

In the meantime, however, a national election had been held and Andrew Jackson became President in place of John Quincy Adams, while John Branch succeeded Samuel L. Southard as Secretary of the Navy. Changes in the membership of the House of Representatives and the Senate had given the new Administration full control of the Government. When the application for this appropriation came before the Senate it was referred to the Naval Committee, who, on February 23, 1829, reported that they were well aware "that a general opinion prevailed throughout the country that the measure had

received the deliberate sanction of both Houses of Congress and that the appropriation of the sum now called for was therefore considered as a matter of course. But . . . the committee was still of the opinion that it was safer to delay acting."

Meantime Lieutenant Wilkes carried his bill for the instruments, which he had been ordered to buy, to Secretary of the Navy John Branch. The Secretary told him "that as Congress had made no appropriation or done any act to countenance the orders given" for purchasing those instruments, he would not pay the bill. Wilkes was therefore obliged to apply to Congress for "relief."

The brig Seraph was returned, "as is and where is," to Captain Pendleton, and in order to get pay for the loss of his voyage to Malaga and the time and money spent in fitting her for the expedition, he was also told to apply for "relief" to a Congress that was hostile to everything which the preceding Administration had done or countenanced, even when the nation as a whole had expressed approval.

The incident was so discreditable that the facts might well have been allowed to lie buried in the unread archives of the period but for their effect upon Captain Palmer and other citizens of Stonington. To them the arrogant attitude of the Jackson Administration seemed little short of a personal affront, and their natural resentment took a form which was a rasping rebuke. Congress had refused to send the expedition on the ground that the

expense was too great for the nation to bear. So the people of Stonington announced that they would send out at their own expense two vessels well equipped, and carrying a force of scientists, to make the desired exploration of the Antarctic region. They acted in the spirit which had prevailed among our sailors of the sail from the day when the keel of the first American ship was stretched. Said Governor John Winthrop, when writing about that ship—the Blessing of the Bay:

"The general fear of a want of foreign commodities . . . set us on work to provide shipping of our own."

A want—any want—set the Yankee sailor of the sail "on work." Wanting ships with which to explore the stormy waters below Cape Horn the people of Stonington provided them regardless of the attitude of the Jackson Administration. Captain Edmund Fanning was too old to take part personally in such a voyage but he was able and willing to take the lead in financing it. Captain Benjamin Pendleton and Captain Nathaniel Brown Palmer were associated with him as financiers, and together they took the risks of the actual exploration. Two brigs, the Seraph belonging to Captain Pendleton, and the Annawan (also written Anawan), of which Captain Palmer was managing owner, were provided. Each captain took command of his own vessel, of course. A third vessel, the schooner Penguin,

a schooner of 84 tons, was added to the expedition after it arrived at Staten Island, and as this expedition was notable in the annals of our merchant marine the addition of the *Penguin* may receive a paragraph, or more.

The Penguin was under the command of Captain Alexander Palmer, the younger brother of Captain Nat, of whom mention has been made. Captain Alex, as he was called, had taken the Penguin on a sealing expedition to Staten Island in 1827, with considerable success, though he was not yet 21 years old. He went to the same region again in 1828, and in the month of October, while lying in North Port Hatchet Bay, Staten Island, he met, as previously mentioned, Commander Henry Foster of the British sloop-of-war Chanticleer, which was surveying the coasts of the islands in the Cape Horn region.

On his return from this voyage Captain Alex found preparations in hand for the Stonington exploring expedition in search of the islands supposed to have been seen by Captains Swain and Macy. He thereupon fitted out for another sealing expedition to Staten Island, and when there he awaited in North Port Hatchet Bay the coming of the exploring brigs *Annawan* and *Seraph*.

While these two brigs were being fitted out, not a few items about them appeared in current periodicals. Thus, Niles's Register printed two during the

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month of October, 1829. On the 3d of the month it quoted the following from the National Journal:

"POLAR EXPEDITION. It is said that Mr. Reynolds, the lecturer on and an untiring advocate of an expedition to the south pole, although defeated in every attempt to induce the government to aid his enterprise, has succeeded in obtaining the assistance of a party of adventurous capitalists, and is about to carry his long cherished design into effect. A paragraph in the New Bedford Mercury states that Mr. Reynolds and Captain Palmer had been in that place for some days, preparing one of the finest vessels ever built in that or any other port, for an exploring expedition to the South Sea. Captain Palmer had shipped part of the crew, prepared boats of the first construction, and obtained other articles for the voyage. The brig was to leave New Bedford, in a few days, for New York, where she will receive on board the remainder of her outfit, previous to her departure. Nothing is said as to any other vessel to be employed in the service, nor is the time for her departure stated. It is understood that the expedition is to be under the direction of Mr. Reynolds, and it will depart accompanied by the best wishes of the country for a safe voyage and a successful result of the enterprise."

On October 24th the Register quoted the following from the New York Enquirer:

"The South Sea Expedition. The brig Annawan, the flagship of the expedition, dropped down to the lower bay, yesterday, and will proceed to sea this morning. Thus, after three years of perseverance and industry Mr. Reynolds finds himself upon the ocean, in search of the undiscovered islands of the south. In addition to the commercial importance of this expedition it is highly important in a national point of view. Whatever lands may be discovered by Mr. Reynolds and his enterprising associates will become the property of the United States. The stores of science will be increased by the products of far-distant islands, as yet unknown to civilized man, and curiosity may, perchance, be gratified by something new.

"We visited the Annawan on Thursday. She is a fine vessel and a very fast sailer. She is furnished with an excellent library, and all the instruments necessary for such an expedition. She has a stout and hardy crew, an experienced captain, and first rate officers. After the commercial objects of the expedition shall have been accomplished, Mr. Reynolds intends to sail round the icy circle, and push through the first opening that he finds. Success to him.

"Mr. R. is accompanied by Dr. Eights, of Albany, a gentleman of talents and scientific accomplishments."

Editor Niles of the Register added the following comment on the statement that any islands dis-

covered would become the property of the United States:

"We much doubt this. We should suppose that they would belong to Mr. Reynolds and his associates—if discovery can give a title! It is a private enterprise, and we are not at all willing that the United States should have colonies."

Another record of the expedition is found in "Fanning's Voyages" (pp. 478-488), in a report submitted by Captain Pendleton to Captain Edmund Fanning, the chief financier of the expedition. This report shows that the expedition was much more ambitious than the newspaper accounts indicated. For, after locating the islands supposed to lie in the seas southwest of Cape Horn, the vessels were to go to the North Pacific to explore the unknown waters there. It was not doubted that the islands below Cape Horn would be found. It was assumed that full cargoes of furs would be secured from them. But the furs were to be shipped home from Valparaiso on some handy freighter, and then the explorers were to sail on to the Alaska waters. It was intended to go to the region where the Pribilov Islands with their herds of fur seals lie.

Still other records of this expedition are found in notes made by Captain Alexander Palmer, but if Captain Nat ever wrote anything about it the manuscript has been lost.

It appears, now, that J. N. Reynolds and a scien-

tist named J. F. Watson sailed on the *Annawan*. Dr. James Eights, a naturalist living in Albany, was also with the *Annawan*.

The Seraph completed her outfit at Stonington and sailed on October 16, 1829, under orders to meet the Annawan "at the distance of four leagues south from the light on the east end of Long Island." The two brigs failed to meet, however, because of "a strong breeze from the eastward which soon increased to a heavy gale and so continued for three days." Each brig therefore headed away for North Port Hatchet Bay, in Staten Island, which had been appointed for the next rendezvous.

A memorandum left by Captain Alexander Palmer of the schooner *Penguin*, says that Captain Nat, in the *Annawan*, arrived at North Port Hatchet Bay, Staten Island, on January 5, 1830, and found the *Penguin* awaiting him. The two vessels remained in the bay until January 14, when they sailed for the Sea Elephant Islands, in the South Shetland group. For about a month the two crews were employed gathering such seal skins as could be found together with sea elephant oil. Various harbors were visited, including Ship Harbor where the wreck of the brig *Clothier* lay high on the rocks.

Soon after the Palmers left North Port Hatchet the Seraph arrived. She remained there until January 22, when she sailed on to the South Shetlands. There is no detailed account of what she did there, but it is stated that she did not meet the Palmers.

The Annawan and the Penguin left the South Shetlands on February 23, 1830, and sailed westerly to search for the two islands supposed to exist there, as reported by the whalers. How many skins and how much oil they had secured meantime is not known. But the summer season was now well spent and the weather, bad at best, grew steadily worse as the days passed. Snow storm followed snow storm. The ice formed on deck and on the rigging so swiftly that the crews were obliged to cut it away to prevent foundering. It was with extreme difficulty that they could handle the ropes and sails. They were continuously wet with the freezing spray and there was no fire in either the cabin or the forecastle by which they could warm their stiffened limbs. But they persevered until the two brigs had covered the region lying between the parallels of 52° and 62° 33' south latitude and the meridians of 61° and 103° 03' west longitude, wherein the islands for which they were searching were supposed to lie. Captain Alexander Palmer wrote as follows about the search:

"No land was discovered. Two voyages, as it is termed, were broken up. Many of the crew were disabled. . . . This cruise furnished an example that no sealer ever wished to imitate, namely to search for land southwest of Cape Horn. . . . On March 19th gave up the search, being convinced that the reported land was not there."

In the meantime the Seraph, after taking a few furs at the Shetlands, also sailed in search of the islands and Captain Pendleton's report says:

"We then had a lengthy cruise of much anxiety and suffering toward the icy region for the discovery of lands to the westward of Palmer Land, and likewise in search of the land said to have been seen by Captains Macy and Gardiner to the southwestward of Cape Horn, of neither of which we were fortunate enough to make any discovery in all that time; nor, in fact, had we the encouragement of passing in the vicinity of any land other than that afforded by the occasional sight of birds, seals, drift, &c.

"By this time our crews were much worn down by fatigue, and from their being almost constantly wet in this region of rough sea and cold rugged weather, with at the same time alarming symptoms of that dread disease the scurvy making its appearance; it was considered most advisable to bear up and proceed for the coast of Chili, there to refresh and recruit our men, and to replenish our wood and water."

The Seraph arrived at Mocha Island on the coast of Chili early in May and there fell in with the Annawan and the Penguin. The three captains then began discussing the voyage to the North Pacific, but the crews of all three vessels at once refused to go. They had shipped under the lay system of pay -no furs, no pay. The officers were buoyed up to endure hardship by their ambition to become known as successful explorers. In spite of-indeed, because of-their failure thus far, they were eager to go on, but the sailors had no such incentive and their hope of profit had failed. There was no attack upon the officers, but when they learned that further exploration was before them they began to desert in spite of the uncivilized condition of the territory off which they were lying. The Pendleton report savs:

"It became necessary for Captain Palmer to put into Valparaiso with the Annawan and deliver a portion of his crew over to the United States consul there. This was the cause of so great delay that it became too late in the season to enable me to act according to your instructions and proceed to the unexplored parts of the northern Pacific. coast of Japan, eastern coast of Asia, &c."

After a consultation with Captain Nat, Captain Pendleton decided to go down to the lower end of Chili and establish friendly relations with the Aurocanian Indians, hoping thus "to procure a good collection of furs, seal skins, &c.," which could be "forwarded home," and thus employ the crews profitably while waiting for the next season during which they could sail for the northern waters. But while the crews were at first satisfied with this move, and many hair seal skins and some furs were secured, the sailors began to desert once more as soon as the cruise to the North Pacific was again discussed. It then became necessary to sail for home before the crews were so far depleted that the vessels could not be handled.

In the meantime Reynolds and Watson were landed among the Indians, with whom they remained after the vessels sailed for home, hoping thus to establish friendly relations for the benefit of future trade, for which it was the intention of Captain Nat, at least, to return.

In connection with this exploring expedition it seems worth noting that in 1841, Captain Dougherty, of the whaler J. Stewart, reported that he had seen an island in south latitude 59° 20' and longitude 119° or 120° west. Then Captain Keates, of the ship Louisa, in 1859, reported an island in the same region. This island is marked on the chart as Dougherty's, but it was not seen by the ship Nimrod, which was in the locality named in 1909, nor by the magnetic survey ship Carnegie, which was there in 1915. A letter from the Hydrographic Office, Navy Department, Washington, dated May 5, 1921, says the office has no record of Swain's Island, and that the existence of Dougherty's Island "is considered somewhat doubtful."

Another record of this exploring expedition is an advertisement, clipped from a local paper, of the "cargo of the brig Seraph, from the South Seas, to be sold at auction on Monday, August 29, 1831, at

2 o'clock P. M." She had brought home 2,024 skins of the fur seal and 13,000 of the hair seal. The number taken by the Palmers is not given in the records, but since they were at the Shetlands in advance of the Seraph, and also arrived on the coast of Chili in advance, it is reasonable to suppose that they did at least as well as Captain Pendleton. It is likely that a small profit was realized out of the expedition.

In spite of energy and persistence, the chief object of the expedition remained unachieved, but even so, and even if a loss was incurred, the work seems now to have been worth while if only as an illustration of the enterprise of the American sailor of the sail in the days when the American merchant marine was making its most vigorous growth.

CHAPTER XII

CAPTURED BY CONVICTS ON JUAN FERNANDEZ

HILE the results of the expedition described in the last chapter ended the ambition of the Stoningtonians to engage in another of the kind, they were encouraged by the outlook for trade on the west coast of South America to make one more venture to that region. The natives at various points on the coast were in the habit of gathering skins of both kinds of seals, and they accumulated the hides of cattle as well. These they were glad to exchange for goods from the United States. While the vast heros of fur seals which had formerly resorted to the island of Juan Fernandez had been well-nigh exterminated some yet came to the beaches, and there were men living on the island (it was a Chileno penal station) who made a business of collecting the skins for sale to passing whalers.

On the whole, it appeared to Captain Palmer that a good profit might be made and he fitted out the *Annawan* for trade there. Two accounts of this voyage remain. One was written from memory by Second Mate George Hubbard, sometime after the brig returned home. The other was written by Frederick T. Bush, formerly U. S. Consul at Hong

Kong, following an account of the voyage given him by Captain Nat.

The Annawan carried a crew of eleven men, all told, and Mrs. Palmer sailed with her husband. The fact that the wife ventured on such a voyage shows that she and the captain enjoyed life together so much that they were willing to risk the dangers rather than be separated.

On the way to the Horn, as the second mate wrote, "we improved every opportunity of making a passage," which means, of course, that the captain "carried on." Off the River Plate a pampero broke the foretopsail yard, but the crew soon made and crossed a new one, and the *Annawan* continued to improve her opportunities for making a passage. It had been said of the captain, when in command of the brig *Francis*, in 1827, that he drove her "until the staves," with which she was loaded, "floated through her seams." He was making a reputation for swift passages that was to be of value to him later.

When the Horn was astern the Annawan headed for Juan Fernandez. Mrs. Palmer wanted to see the island made famous by Alexander Selkirk, whose life there had inspired the story of Robinson Crusoe. The captain hoped to secure seal skins and he was confident of obtaining quantities of fresh provisions. The Annawan arrived within view of the island on the last day of December, 1831. Says Hubbard's account:

"In the morning, being quite handy to the island, Captain Palmer took our small boat, with two seamen, and started for the shore, the brig lying off and on."

About two hours later a Chileno brig, which had also been lying off and on, eased her sheets and ran down within hail of the *Annawan*, where one of her officers told the American crew that the convicts on the island had overpowered their keepers and were in full control.

It was so. The Chilenos had supposed that the island afforded an absolutely safe prison for their felons, but the convicts had not only taken charge of the island; they were at that moment preparing to use the *Annawan* as a means of escaping to the mainland.

When the Annawan was first seen approaching the island the convicts had been greatly troubled because they supposed she would hasten to Valparaiso and bring a warship to subjugate them. But when they saw the captain on his way to the shore they determined to capture the vessel and make their escape in her. To this end a squad of well-armed men was placed in ambush near the usual landing. Wholly unsuspicious, Captain Palmer came to the beach where he and his men pulled the boat up to a safe distance above the tide. Then when the three started up the slope the convicts surrounded them, blindfolded their eyes and led them to the

prison chapel where the leaders in the mutiny were in waiting. Any attempt to resist at that time would have been suicidal and none was made.

When in the chapel the three were led to the altar, turned to face the assembled mob and then the blinders were removed. For a few moments no one spoke a word. The captain saw before him more than 100 outlaws of whom some were redhanded highwaymen, and some were savage pirates, the offscourings of the Seven Seas, who had fled to the Chileno coast to escape the vengeance due for crimes committed elsewhere.

Finally, one of the convicts proposed that the captain be killed as a first step in the work of capturing the *Annawan*. The mob shouted approval. The captain was again blindfolded and was then placed against one wall of the church while several men with loaded muskets were ordered to take a position ready to shoot him. But in the meantime, by a sign and a spoken appeal the captain had told any one in the mob who was able to understand him that he was a member of the ancient honorable fraternity of Freemasons—he begged for help in a way that no brother Mason ever failed to recognize and none ever ignored.

The convicts were a hellish crew, but among them was one man, a political prisoner, who was a Mason; and as it happened he was the leader who had planned the overthrowing of the prison authorities. Very adroitly, now, this leader explained to the

mob that it would be better to spare the life of the captain and take him along to handle the brig in her passage with the convicts to the mainland. Then he ostentatiously told the captain to choose between carrying the convicts to the mainland at a point which they should choose, or facing the firing squad. The captain, perceiving that this leader was a brother Mason, at once agreed to take orders from him. The captain was thereupon released.

When the blinder was removed from his eyes Captain Palmer suggested that he should send orders to his mate to prepare the brig for the company to come. This was a reasonable thing to do, for the brig was in no shape to carry so many passengers, and he was allowed to write a note which his sailors carried off to the brig.

First of all in the note, however, Captain Palmer told the mate to clear out a spare stateroom, in which bread had been stored, and put Mrs. Palmer in it and lock the door. As thus prepared this room was a dungeon and it was arranged so that no port, even, was open to admit air or light; for it was absolutely necessary to take every precaution to prevent the outlaws learning that she was on board.

When this work was done, the mate went on with the other preparations for the reception of the convicts, but long before the brig was ready, the mob came howling off in such boats as the settlement afforded. And when they arrived, Mrs. Palmer, sitting in her darkened prison, heard the shrill voices of women mingling with the coarser shouts of the men; for there were female as well as male desperadoes among the convicts.

As a matter of fact, the coming of the women was contrary to a promise made by the mob leader. Captain Palmer had learned, as soon as he was released from his place before the firing squad, that the women were also determined to go in the brig, and he had remonstrated with the leader. He had perceived instantly that if the women were taken on board they would necessarily be cared for in the Annawan's cabin. If they were taken into the cabin they would, sooner or later, learn that Mrs. Palmer was in the spare stateroom. But that was not all the trouble to be feared in connection with the women, for it was certain that the convicts would fight over them, perhaps even before the brig could leave the island, and how such a fight would end no one could foresee. At all hazards Captain Palmer was determined to leave the women on the island.

But when the men began to enter the small boats in order to go off to the brig, the women, being free to roam around at will, ran down to the beach and clambered into the boats—and here they were along-side the *Annawan*, making more noise than a flock of gulls around a dead whale.

But as they climbed over the rail, gabbling and laughing, Captain Nat returned to the *Annawan*. Ten years had passed since he had stood unabashed

before Captain Bellingshausen in the cabin of the Russian frigate. Then he had been tall, slender and boyish; now he was tall and powerful and of commanding presence—a fully developed autocrat of the quarterdeck.

Walking across the Annawan's deck to the rail over which the women were climbing, he ordered them all to return at once to the land. The women screamed and squalled and begged as if they were suffering tortures, but the convicts—the men instinctively obeyed the order and took them all back to the beach. One may search the records of the sea for all times without finding a more striking illustration of the power of a dominating mind.

Meantime, Mrs. Palmer, sitting in the darkness of her little prison, heard the shrieks of the women, but did not hear the imperious order of her husband. So she believed that the women were being tortured and she suffered indescribably through sympathy and through fear that she might also meet the fate

which seemed to come upon them.

In time the male convicts were all taken on board-104 of them-and the brig was got under way for the mainland. Then, as night came on, the wind failed. The convicts, fearing that a Chileno warship would come, were unable to sleep and they therefore passed the night on deck in groups that surged to and fro, cursing incessantly, and always in a state of mind where but a slight incentive was needed to set them in deadly conflict with the crew of the vessel and with each other. At daybreak it was seen that the brig had drifted nearer to the island instead of making headway toward the main. At that, some one loudly declared that the brig's captain had held her there in order to deliver her to a coming man-o'-war, and the cry was followed by a mutiny. The mob took possession of the vessel.

For a time the outlook was most serious, but the leader of the mob worked with the captain and convinced the mob that no one could be properly blamed for the position of the brig; and while the argument was slowly seeping into the minds of the desperate convicts, a fair breeze came and sent the brig on her way.

Of the day-to-day incidents of the Annawan's passage to the coast of Chili there is no record, but none is needed. It is enough to know that the wind was so light that ten days were consumed in making the 400 miles, and that during all that time more than 100 desperadoes were raging around the deck of the little brig, day and night.

During this time Mrs. Palmer was, of course, held in her prison. The captain did not dare to speak to her or to make a definite signal. But as opportunity was afforded he paced the deck above her head and there issued orders to his crew in a voice which she could hear, and he thus assured her that he was as yet unharmed and in command.

Finally, the land was seen and a leading breeze

drove the *Annawan* to a practicable landing north of Copiapa, where, screaming with delight, the outlaws crowded into the boats and were landed.

When freed from the convicts the Annawan went to Pisco, Peru, where some seal skins were bought. Thence she went to Callao, where the U. S. Ship Plymouth, Master Commandant Francis H. Gregory, commanding, happened to be at anchor. To the astonishment of the Annawan's company the naval sailors manned the yards and gave three cheers as the brig sailed into the anchorage. Later it was learned that Captain Gregory had heard about the capture of the Annawan and he was at the point of sailing to look for her when she came into port.

Later still the *Annawan* went to Valparaiso where it was learned that the convicts, after landing, had fled inland. Then with a lack of foresight common to men of such a mental caliber, they had preyed upon the inhabitants—even those who were friendly—until an appeal to the Government for help brought a regiment of soldiers who rounded up the entire mob.

While the *Annawan* was yet at anchor at Valparaiso the convicts were brought there and reembarked for their prison island, and the vessel which carried them passed close to the brig. The convicts were seen to be a most disheartened lot, but when, in passing, they recognized the *Annawan* and her crew, they shouted repeatedly,

"Los buenos Americanos! Los buenos Americanos!"

They were desperadoes, the offscourings of the Seven Seas, but during that passage of ten days from Juan Fernandez to the mainland, they had yet found the master of the *Annawan* and her crew muy simpatico.

An incident occurring in one of the ports visited, as described by Second Mate Hubbard, gives an unusual view of Captain Palmer. During a previous visit to the port Captain Palmer had made friends with the Captain of the Port, an important official on that coast. Nevertheless, when the *Annawan* returned there, and Mate Dudley Robinson took a boat ashore to get water, he and the crew were captured by a band of armed men who had been hiding in the brush near shore. Why this was done none of the crew could learn. Hubbard continues:

"Soon after Capt. P. was informed of the arrest he went on shore and found out the trouble. He became greatly enraged and called on me to bring my gun; and with himself with a gun and both well loaded, and [with] two men in a small boat, we landed on the beach, swearing vengeance unless our men were immediately released."

Then the Captain of the Port came on the run and the *Annawans* were released and provided with water.

140 Captain Nathaniel Brown Palmer

Business was so good on the coast that when the Annawan was filled with products, Captain Palmer freighted a ship home and continued trading until July 9, 1833, when he sailed for home. The last entry in the brig's log (a most interesting old blank book made of soft paper sewed with a single stitch into a cover of unhemmed canvas) contains the following:

"Wednesday, 25 Sept. Remarks on board.

"This day comes in with moderate breezes from the westward. All dragging sail set. At 1:30 made Montaug Light. At 10 A. M. anchored in Stonington Harbor."

CHAPTER XIII

THE YANKEE PACKETS

FTER Captain Nathaniel Brown Palmer returned home from the voyage to the Cape Horn region, described in the last chapter, he entered upon a career which is of especial interest in any history of the American merchant marine. For ever since the end of the War of 1812, American shipping had been securing a leading place in the trade between the United States and Europe, and the captain was now to take a prominent part in the work of furthering the American advance, and in sustaining it in every forward step made thereafter. And this is to say that he was, first of all, to become a leader among the designers and commanders of the packet ships of which all Americans then made boast; and later, when the demand for fast ships in the China tea trade arose, and brought into existence what have since been called the Yankee clippers, he was the designer, and the captain as well, of the first of that famous fleet. In fact, a time came when the British Admiralty were so enthusiastically interested in a clipper of his design that they minutely measured her, as she lay in a drydock, hoping thus to learn the secret of a record passage which she had made from Canton to London.

For more than fifty years at this writing—in fact, ever since the Civil War—the editors of our magazines and of our newspapers have been writing over and over again that the American clipper ships were in all respects superior to (meaning more efficient than) all other ships afloat in their day. So often has this statement appeared in print that every backwoodsman in the nation has read it, and it is universally accepted as true beyond question.

Unhappily, however, a study of the situation shows that while some American ships were more efficient than any affoat in their classes, the bald statement, as printed, lacks discrimination; and ignorance of the facts is especially deplorable because our legislators who are now (1921) trying to sustain our over-built merchant fleet, could serve the industry far better if they knew just when and in what respects our splendid ships of the sail, called packets and clippers, were superior to those of European construction; and when and wherein those same ships failed to maintain the standing which they had honestly secured.

Because Captain Palmer had, as said, a notable part in the work of giving our ships of the sail their reputation, and because, too, he was concerned when those ships lost caste, the whole story of the fleet as well as his work with them, must be told in considerable detail.

It is important to observe first of all that our clippers composed a fleet entirely distinct from that of the packets. The packets were passenger carriers as well as freighters plying between the principal ports of the United States and Europe, and they sailed on regular schedules. The clippers were freighters only and they were built for the China trade. The packets sailed when the hour came, regardless of the amount of cargo on board. The clippers were loaded to the hatch coamings at every passage.

The name packet was first applied to a vessel by the British. Because the Empire was spread around the world it was necessary to provide means for carrying mails at frequent and regular intervals between London and the various colonies. For this purpose the Admiralty built swift brigs, and one of these was despatched at stated intervals to this and that port in the colonies. Perhaps it was because the letters were done up in packets that the vessels came to be called by the same name.

As the mail lines did not receive a profitable income from the freight and passengers carried, in addition to the mails, no one thought it worth while to establish a packet line at private expense, even between such ports as New York and Liverpool, until long after the American colonies had developed into an independent nation. But in the meantime a packet business had developed on the Hudson River which proved to be at once remarkably convenient

for shippers and profitable for the owners of the vessels. Because of the character of the traffic on the river the sloops which were used for passengers as well as freight, had regular days of departure from the various towns and for the return, as well. They sailed from their landings at the advertised time regardless of the amount of freight on board, or of the number of passengers.

Because of the regularity of the sailings, farmers drove forty miles and more to deliver produce to sloops bound down to New York and passengers came from towns in Massachusetts to Poughkeepsie to sail thence to New York rather than travel by

stage over the highway through Connecticut.

The packet service which originated on the river was naturally extended to the alongshore trades, and in every such extension it was found that a regular service was more profitable than one wherein the vessel awaited a full cargo before sailing.

In 1816, while young Palmer was sailing before the mast on Long Island Sound, Jeremiah Thompson, Isaac Wright, Benjamin Marshall, and a few other capitalists of New York, organized a company to establish a packet service between New York and Liverpool. It is to be noted that this organization was effected to provide an improved service. Theretofore the ships in the Liverpool trade had sailed only when they were full of cargo, and the consequent delays were especially annoying to passengers, for the reason that they were kept waiting

in uncertainty for days and even weeks at a stretch. When the new line was established passengers and shippers alike were fully assured that a ship would sail on the first day of each month, regardless of the amount of freight in the hold or the number of passengers in the cabin; and regardless of the weather, as well.

The ships provided were not the largest afloat (400 to 500 tons), but they were of the best construction—coppered and copper-fastened. They were fit to carry sail in all weathers and the cabin accommodations were the most comfortable afloat.

The success of this line, which was called the Black Ball, was so great that other lines were soon established in competition, and lines from other ports also came into existence. Of these American packet lines McCulloch's "Commercial Dictionary," published in London in 1839, contained the following in its description of the commerce of New York:

"The establishment of regular packet lines from New York to foreign ports, and also to every principal port in the United States, has produced a new era in the commerce of the city, and redounded equally to the benefit of the enterprising individuals by whom they were projected, and the public. The principal intercourse is carried on with Liverpool; there being about twenty packet ships distributed in four lines employed at present (1836) in maintaining a regular communication with that port. A

dozen packet ships are also employed in the trade between New York and London, and fifteen in the trade between New York and Havre. These ships vary in size from 450 tons, the burden of the smallest, to 800 tons. Their tonnage has latterly been increasing; and, at an average, it may now be estimated at about 600 tons.

"These ships are all American property and built chiefly in New York. They are probably the finest and fastest sailing merchant vessels in the world; being beautifully modelled, of the best workmanship, and fitted up with every convenience for passengers, and in the most expensive style. The safety, regularity and expedition with which they perform their voyages is quite astonishing. The average length of a voyage from Liverpool and Portsmouth to New York may be estimated at about 34 days, and from the latter to the former at about 20 days. The Independence, of 730 tons, Captain Nye, made the voyage from New York to Liverpool, in the course of the present year, in 14 days; and the Toronto, of 650 tons, Captain Griswold, made the voyage from New York to Portsmouth in the same time. And it is material to observe that these voyages are not reckoned from land to land but from port to port.

"Cabin passage to New York from London and Liverpool 35 guineas; from New York to London and Liverpool 140 dollars; a cabin passage to New York from Havre 140 dollars and from New York to Havre the same. This includes provisions, wines, beds, &c., so that the passengers have no occasion to provide anything except personal apparel.

"Each ship has a separate cabin for ladies; each stateroom, in the respective cabins, will accommodate two passengers; but a whole stateroom may be secured for one individual at the rate of 1½ passecured."

sage, that is 521/2 guineas to New York.

"The rate of steerage passage varies, in the course of the year, considerably; depending upon the number of ships and the number of passengers going at the time. . . It fluctuates from three to six guineas for each full-grown person; and children under fourteen years are taken at half price. . . . For these rates the ship provides nothing but fire and water; the passengers provide their own provisions, bedding, &c.

"STEAM PACKETS.—It has been proposed to establish steam packets between New York and Valentia harbour, on the west coast of Ireland; but as yet little progress has been made in the undertaking. It may be doubted, indeed, seeing how well the intercourse is maintained by the sailing packets, whether the introduction of steam packets would be of material service."

The "Dictionary" also says that the prices charged passengers by the packets were always at least 40% higher than those of the hit-or-miss carriers, and in some cases they were 100% higher.

The freight rates of the packets were around 33 1/3% higher. And that is to say that the ships which gave the most satisfactory service secured the cream of the traffic (more especially the package goods), and all at a highly profitable rate. Service was, and always is, worth an extra price.

The exigencies of the packet trade naturally created a demand for captains who were able to handle ships under all circumstances, and more especially to keep them going at the highest possible speed. A packet captain needed, first of all, a knowledge of what his ship could endure under a press of canvas —he needed to know when he might spread more canvas to the gale and when he must reef down to save the spars. Having this knowledge it was imperative that he should also have the courage to carry sail when an ordinary captain would reef down -to carry as much sail in the midwatch as in the morning watch. It was a courageous seaman who could order the crew to shake out the reefs in the topsails at the call of the watch at midnight, even though the power of the gale had moderated somewhat.

Of little less importance was the personal bearing which made the crew feel that the captain was an absolute monarch whose orders *must* be obeyed under all circumstances. In pleasant weather this was a matter of less importance, but when the ship was driven until the timbers groaned and the rigging shrieked under the strain, it was absolutely

necessary that the crew run with all their might at the order to reef down. It was only by their utmost exertions that the crew could then save the canvas or even the ship itself from destruction, and a man who could compel them to work in that way was needed. The owners of the packet lines searched the ports of the nation to find the men they needed.

Because many books, and more particularly novels, have declared that the seamen were brutally treated on the American packets, it seems worth while to give a paragraph to the facts here. While the packets were increasing in number and efficiency it appears that seamen were scarce. To keep their ships well manned the packet captains paid higher wages than any others in the world. When the foremast hand in the navy received but \$12 a month the sailors on the packets were paid \$17 to \$18. There is a record of a packet race in which one ship (the Sheridan) carried a crew of forty picked men who received \$25 a month. The food supplied the sailors was of good quality and ample in quantity.

Because of these conditions and because the passage was usually short a remarkable class of men came to the packet forecastles. They were all foreigners save a few American youngsters shipped solely with a view to promotion—never to join the forecastle "labor class." There never was a forecastle class among American seamen. The foreigners were a husky lot on the topsail yard, but as a rule men who preferred this service because it

transferred them swiftly from the brothels of one port to those of another. They were well able to "hand, reef and steer," but they knew nothing of the nice work of the "marlinspike sailor," because they never had opportunity to learn it. Such work was done on the long voyages only.

When these foreigners came for the first time to the packets they had sea habits which usually made trouble. The best of them came from the service of the British East India Company ships all of which sent down royal yards every night, even in the finest weather, and whereon the topgallant sails were furled and a reef was turned into the topsails whenever there was the least sign of worse weather. Naturally such sailors moved in a leisurely fashion -at first. A man who had been called to shorten sail might stop long enough to take a chew of tobacco before responding. He was also likely to fail in showing the respect due to a superior officer, for discipline was slack on most European ships, but the unpardonable sin was failure to "show willing" when ordered to work. As to the worst class of foreign sailors they were simply the offscourings of the ports—vicious brutes who were always looking for trouble. Taken as a whole, it must be said that the most difficult crews to control that were found afloat in the packet days were those in the packet forecastles.

The master of a packet needed knowledge, skill, and courage as a seaman, but more than all else

needed the ability to maintain discipline at all times while yet influenced by a strong sense of justice. Finally he needed the tact by which selfish, sick and unreasonable passengers are handled when at sea. As said, the owners of the packets of New York were constantly searching the ports of the nation for captains who were in all respects fit for the important post on the quarterdeck of a Liverpool liner.

They were searching when Captain Palmer returned from the voyage around the Horn in the Annawan, and they then came to hear the story of his adventure with the mutinous convicts. The captain was already well known among owners of coasters, at least. They knew that he had nonchalantly sailed a fifty-foot sloop through the gales and among the clashing ice-fields on the rim of the Antarctic Continent, and that he had fitted out and sailed a brig on an exploring expedition through the unknown seas southwest of Cape Horn. They had discussed his ability as a diplomat when dealing first with the sensitive lieutenants of Bolivar and then with the titled and snobbish officers in command in Cuba—officers who held all Americans in contempt. To the record thus made was added now the story of the Annawan at Juan Fernandez and the owners of the packets were convinced that the young captain from Stonington was of the breed needed for packet ship command.

The packet manager to act first on the opinion that Captain Palmer was of the right build, was

E. K. Collins, managing owner of a line of ships trading between New York and New Orleans. He placed the captain in command of the ship *Huntsville*. It is worth noting that Captain Alexander S. Palmer, the young brother who had sailed on the exploring expedition in the schooner Penguin, was also taken into this service and given the command of the *Louisville*.

As the reader knows, the New Orleans service was peculiar in one respect. The passengers who were carried were usually from the slave-states—either slave owners or in full sympathy with slave owning. Those people were, as a rule, seriously prejudiced against every one of the Yankee breed. To hold the good will of these patrons of the line without a sacrifice of principle required diplomacy; but it is a matter of record that Palmer was called "Captain Nat" in New Orleans as he was in New York.

While Captain Palmer was in command of the Huntsville, Collins was considering the feasibility of establishing a new packet line between New York and Liverpool. The five lines already in that trade had given good satisfaction, as McCulloch's "Dictionary," quoted above, said, but Collins was of the opinion that the service rendered might be improved. The care and comforts given the passengers, as he supposed, were not quite up to date, and he was contemplating the initiation of a superior service.

To learn how Liverpool people might regard the

establishing of a new line, Collins sent Captain Palmer there in 1835. While the report the captain made on his return has been lost, it appears that Collins, and his associates in the New Orleans line, were convinced that the contemplated line would prove to be a commercial success. When they had come to this decision they determined that new ships, especially designed for the trade, should be built, and Captain Palmer was employed to make the model and superintend the building.

For, during all the years since he had listened to the discussions among the ship carpenters in his father's vard at Stonington, Captain Palmer had worked over and dreamed about models of ships. When telling what he was doing while pacing the deck of the fog-bound Hero, on his return from the shores of the Antarctic Continent, he said he was "building castles in the air." We may believe, from what we know of his habit of thought, that he laid out a shipyard beside each of those castles and that each yard was provided with an ample loft wherein the dreamer was to lay down the lines of many ships of improved models. At any rate it was the captain's manifest and oft-expressed interest in the improvement of shipping that led Collins to employ him as the designer of the Dramatic Line of packets, as the new fleet was named.

CHAPTER XIV

COMMODORE OF THE DRAMATIC LINE

RECORD of the work done in Brown & Bell's shipyard, at the foot of Stanton Street, New York City, between the years 1821 and 1847 (printed in Hunt's Merchants' Magazine, December, 1848), shows that four ships were built there for Collins's Dramatic Line, as follows:

In 1836 the Garrick and the Sheridan were launched. Both were from the same model and each measured 927 tons. In 1837 the Siddons was built from the same model as the other two, and finally, in 1839, the Roscius was built from a new and improved model, her measurement being 1,009 tons. A description of the Roscius, which was printed in the New York Express at the time she was launched, runs as follows:

"We have from time to time given descriptions of the various ships which have been put afloat. . . . We have now another to add—the ship Roscius, built by E. K. Collins, belonging to the Dramatic Line, and to be commanded by Captain John Collins. She is the largest that has yet been built, and for strength and beauty is a noble specimen of

American shipbuilding. The following are her dimensions:

"Burden, 1,100 tons; length of main deck, 170 feet; length of spar deck, 180 feet; breadth of beam, 36½ feet; depth of hold, 22 feet; height of cabin, 6½ feet; height from keelson to main truck, 187 feet; length of main yard, 75 feet."

To describe in detail the velvet used upon the sofas, the Wilton carpets on the cabin floor, the "scarlet marino" drapery, the "white curtains" and other features of the cabin, as the Express did, would require too much space. It is enough to say that she was in this matter more luxuriously provided than any ship on salt water. Perhaps it should also be noted that she cost \$100,000, or \$100 a ton, and was therefore the most expensive ship in the transatlantic trade. It was not because we could build wooden ships at a less cost than the Europeans that our packets dominated the North Atlantic. It was because we could and did build the most efficient ships for the trade.

The peculiarities of the models of our ships shall be considered in another chapter wherein the work of Captain Palmer in developing the famous fleet of American clipper ships is described. Here it may suffice to say that while only one of the four ships of this line ever broke the record for swift passages across the Atlantic in either direction, they stood at the head of the procession of the American packets for all around efficiency before the first clipper ship was designed or even thought of. That is to say, the record of the ships as a fleet—or say squadron—for continuous good and profitable work, excelled the records of the other lines of packets. The Dramatic Line obtained and held its lead among the packets because its ships, year in and year out, were the most dependable afloat.

With the exception of the Roscius, Captain Palmer took command of each of these ships for one voyage when it was put in commission. He was the commodore of the finest fleet of ships in the North Atlantic, just twenty-two years after he had shipped as a boy of fourteen on a blockade-runner, on Long Island Sound, during the War of 1812. In those days sailormen used to hold long arguments over the question as to whether the most efficient ship masters were those who began sea life before the mast or as clerks in the cabin. In the vernacular the question was: Is it better to crawl in through the hawse pipes and work your way aft, or to blow in through the cabin windows? The question is yet discussed in a mild, academic way, with no decision in view, for the reason that good captains have come to the quarterdeck by both routes; but when the question was argued in the old days those who favored the forecastle route were able to point with pride to Captain Nat Palmer, one who arrived by working his way aft.

Of Captain Palmer's life as a captain in the Liver-

pool trade few stories are remembered [there is one to be related in the next chapter] because he never had any trouble with his crews or any adventures. His ship went to sea, made her passage, discharged her cargo, took on another and returned home. Passengers and cargoes were delivered in excellent order. He was highly esteemed because his voyages were uneventful. He earned the highest praise bestowed by ship owners and other alongshore people when it was said of him that "he never cost the underwriters a cent."

As Captain Palmer was, during these years, growing wealthy—gaining through faithful work a position among the "capitalistic class"—a paragraph about the pay of the packet captains may be worth giving. Like that of the others in the trade the captain's pay—his regular salary—was \$30 a month. To this absurd sum, however, was added 5% of the money received for freight, 25% of the money paid for cabin passages, and all the money received for carrying the mails. The captain was also allowed to carry his wife, board free.

To get an idea about the amount of freight money collected for passage, here is a note about the Dramatic Line ship Garrick. She was driven ashore on the Jersey Beach in January, 1841, and Niles's Register, when reporting the fact, announced that she was bringing "cargo estimated to be worth 400,000 dollars—though she was not more than one-third loaded." For the cargo on a single passage

the packets sometimes received from \$30,000 to \$50,000 as freight money, and on this the captain collected 5%. The number of passengers varied from 20 to 100. Because of his very great popularity among travelers that frequented the packets, Captain Nat had a greater number in his cabin than the average ship—say 400 in the course of a year, at \$140 each, of which he received 25%. Of the number of letters carried no estimate is to be found, but it is to be remembered that the postage rate in those days was 24 cents per ½ oz.

As said, Captain Palmer grew rich rapidly after he entered the packet service. And in connection with this matter it is to be noted that he, like all the captains in the trade, owned a share of a sixteenth or an eighth in every ship he commanded, and every ship was expected to earn her cost in every year she was affort.

While the records of the voyages which the captain made in the Liverpool service are devoid of such incidents as strandings and collisions and fires in the hold and dismastings during the gales, there is one feature of his work as a master that may yet be described, and that was his method of taking the ship from her pier to sea, and from the sea to her pier, when wind and tide favored. People who go to the New York piers in modern days to see their friends depart for Europe observe that the captain of the steamer, though perched on a high bridge, is an inconsequential figure—one, in fact,

who is not commonly noticed by the people who are standing on the pier. If the attention of spectators should be especially called to him they may see him wave his hand to somebody on or perhaps off the bow of the ship—wave it as an order to cast off the lines holding the steamer to the pier. Another wave or two releases her at other points. Then as the water is churned up beneath her stern by the revolving propeller she backs slowly into the river, where a lot of fussy tugs gather around her and push on one bow and on the opposite quarter until she is at last headed down toward the sea. Then she manages to get away on her course.

When the wind and the tide served as the Garrick lay stern to at her East River pier, Captain Palmer, big, burly and commanding, came to the starboard side of the quarterdeck and with trumpet in hand gave orders, distinctly heard but never boisterous, under which the great topsails were spread by sheets and halyards flat aback to the breeze, the jibs were hoisted and the spanker loosened. The straining lines holding the ship to the pier were now cast off, and under the impulse of the breeze alone she backed into the river where her stern was turned up to the north by the handling of the jibs and the bracing of the vards on which sails had been set-she was backed until she was well clear of the pier—and the bow was pointed toward the sea. Then the spanker was hauled aft, all the lighter sails and the courses

were swiftly spread, the staysails were run up be-

tween the masts and with a throng of enthusiastic spectators shouting themselves hoarse in vain efforts to express their appreciation of the master's skill, the

ship fled rippling down the bay.

More difficult still was bringing the ship to her pier at the end of the voyage. Tugs were to be had -great, squat, side-wheelers, as homely as sin-but when the wind and tide favored Captain Palmer would have none of them. Coming up East River on the port tack with all plain sail set he stood well over to the Brooklyn side until the ship's pier had been passed to the exact distance needed. Then he turned the ship to the starboard tack, reached across to the pier, and while the crew lowered away on halyards and hauled up on all clewlines and buntlines, and yanked at the downhauls hand over hand, the clean hull slipped into her berth without so much as scraping her freshly painted side on a stringpiece, until her fasts were thrown over the timberheads

It is pleasing to recall, now, that when an American ship master brought his ship to her pier under sail the British captains who happened to be in port always joined most cordially in the applause which greeted the exploit. Moreover, the record-breaking feats of all the American packets, and the new packets as they appeared, were described in the British papers in terms of highest praise. There was nothing small about the most energetic rivals of the Yankee sailor of the sail.

It is therefore proper to inquire how it came to pass that Yankee captains were so far superior to those of all other nations. The British themselves answered this question for the benefit of their own seamen. A committee of Parliament, which had been appointed ostensibly to "inquire into the cause of shipwrecks in the British merchant service," made a report which was printed in the London Courier on August 18 and 20, 1836, and reprinted, in part, in the Army and Navy Chronicle (Washington) on October 6. The following paragraph appeared in that report:

"AMERICAN SHIPPING.—That the committee cannot conclude its labors without calling attention to the fact that ships of the United States of America, frequenting the ports of England, are stated by several witnesses to be superior to those of a similar class amongst the ships of Great Britain, the commanders and officers being generally considered to be more competent as seamen and navigators, and more uniformly persons of education, than the commanders and officers of British ships of a similar size and class trading from England to America; while the seamen of the United States are considered to be more carefully selected and to be more efficient; that American ships sailing from Liverpool to New York have a preference over English vessels sailing to the same port, both as to freight and rate of insurance; and, higher wages being given, their whole equipment is maintained in a higher state of perfection, so that fewer losses occur. . . . The temptations offered by superior wages of American vessels cause a large number of British seamen every year to leave the service of their own country, and to embark in that of the United States, and these, comprising chiefly the most skilful and competent of our mariners, produce the double effect of improving the efficiency of American crews and in the same ratio diminishing the efficiency of the British merchant service."

Captain Palmer was conspicuous among those American ship masters who were, as the committee of Parliament declared, "more uniformly persons of education" than British ship masters, but it is to be remembered that after he was fourteen years old his schooling was secured on board American vessels. He had by conscious endeavor educated himself throughout his career as foremasthand, second mate, mate and master.

For the American people who are now (1921) trying to maintain an overbuilt merchant marine, the quotation above from the report of the Committee of Parliament contains some of the most important statements of fact ever printed. Summed up in a single sentence the committee's report said that American ships had a "preference over English vessels" solely because vessel and crew taken together as a unit were more "efficient." The whole story of American leadership at sea is told by that

single word efficient. The cost of our packets at an average \$90 a ton was higher than the cost of British ships of a similar size, and the crews received higher wages, but this combination of cost produced a more efficient carrier and it was therefore more profitable.

In the earlier years of the century while seals were to be had, our ships dominated the fishery. After the seals failed, our ships rapidly secured the lead in the whale fishery, a lead that was greater than any other whaleships had had even when the War of 1812 was raging. Between 1816 and the advent of the steamship, our Liverpool packets were without foreign competition. But until the year 1844 the long-haul trade between Canton and civilized ports was chiefly in the hands of British shipping. There were American ships in the trade that made money, but they did not encroach, or say dominate, as they did in all other trades of importance. How the Yankees gained supremacy in the China trade after 1844 is one of the most interesting chapters in the history of the sea and the story shall be told because of Captain Palmer's part in the work.

CHAPTER XV

RECORD PASSAGE FROM LIVERPOOL TO NEW YORK

EFORE describing the work and influence of Captain Palmer upon the American clipper fleet it is necessary to tell why he left the packet service. As previously noted, the packet service demanded that every ship be driven to the last gasp on every passage in either direction. There was no weather bureau to give advance notice that a storm was impending, and if such a notice had been printed the packet captain would have rejoiced

to take advantage of the power of the gale.

Even when the first northeast breath of a West India hurricane came, moisture laden, across New York Bay at the hour of his departure, Captain Palmer hauled his ship into the stream, scudded down the bay to Sandy Hook, discharged his pilot, and then, with all plain sail set at least up to topgallant sails, he stood out to sea. The long waves -"the dogs coming before their master"—with the growing weight of the wind compelled him, in time, to decrease the spread, but he did it grudgingly, one sail at a time, and only when the ship was reeling her lee scuppers into the solid water, and the lee yard arms were down to the waves, was a reef turned into the topsails.

While the ship plunged and plowed her way to eastward the captain remained on deck, no matter how competent the junior officers, for he alone was responsible for the speed of the passage and the safety of the ship. All night he paced the quarterdeck. When day came struggling through the murk the steward brought a big armchair and secured it under the weather rail. In that the captain sat down for a rest, now and then, but never for a moment did he fail to give heed to the wet sails and the straining gear aloft. His meals were brought to him as he sat in the chair, with now and then a cup of coffee between times, but he was on his feet, pacing to and fro or walking forward for a look at the head sails during many more hours of the day than he was seated in the chair. The next night found him as vigilant as ever. For him there was no watch below. Day on day and night on night he turned his eyes from the reeling spars to the raging seas and back again to the spars. He was wet by the clouds of spray that came over the weather rail and by the solid blue water into which the lee rail sagged at every roll; he was chilled by the wind as well as the water; but he remained on deck, ready on the instant for every emergency, while the storm lasted. No firmer hand than his ever drew the reins over Neptune's white-manned horses.

For a summer storm, no matter how long it endured, such an experience rarely if ever provoked a comment on his arrival in port, unless, indeed, he

happened to be racing with a steamship, when he would ask by how many hours he had beaten her. And even when he had faced the snow-laden and sleet-laden blasts of winter in the "Roaring Forties" for a fortnight at a stretch, with no more sleep than could be had in an occasional nap in his armchair, he spoke of the experience, if at all, only as a matter for quiet satisfaction rather than complaint.

Nevertheless a time came, when his body could no longer endure the strain even though it were sustained by an iron will, and his health failed so far that he had to leave the service. Of course he did not sever his connection abruptly. He went to New Orleans in 1839 for a rest. He had a brother who had been established in business there for years, and the manner of life in the Crescent City delighted him and brought renewed strength. So he came back to command the Siddons, and in a passage beginning at Liverpool in October, 1840, he drove his packet across the Atlantic and to her pier in New York in fifteen days. This was the shortest westward passage between Liverpool and New York of which there is any record. The next in length of time was made by the Yorkshire, Captain Bailey, in 1846. She crossed in sixteen days. The passage of the Siddons has been overlooked by modern writers because the captain avoided instead of seeking newspaper notoriety. In a letter to his family in Stonington, dated October 25, he gives the length of the passage, but adds no details. The important news, in his view, which he had to convey was the effect of the strain he had suffered upon his health. He had finally broken down and was to sail immediately for Havana in the hope that the change of climate would prove beneficial—as it did. But the unequaled westward passage of the *Siddons* was his last as a master in the packet service.

Among the few remaining notes on the life of the captain in the interval after he left the packets and before he began his career with the clippers is one that says he made a voyage to Rio Janeiro for a cargo of coffee, in the ship Hibernia. He was back in New York on May 20, 1841. On July 4 he went fishing off Block Island and caught eighty mackerel. On January 12, 1842, he sailed from Norfolk, Va., in the U. S. Sloop of War Marion, Captain Gouldsborough, bound for Rio Janeiro, where he was to take command of a vessel loaded with coffee. His next command was the ship Paul Jones, belonging to Robt. B. Forbes, of Boston, and Russell & Co., of Hong Kong. She was a new ship, bound to Canton for a load of China goods. She sailed from Boston on January 15, 1843, and made the passage to Hong Kong in 111 days, a short time for that day. The voyage as a whole was uneventful in all respects but one. While on the way home he carried a passenger with whom he frequently discussed the conditions then prevailing in the China trade, with the result that he determined, after arriving in New York, to enter the China service as part owner and master of a ship, and this ship became the first of the great fleet of American clippers.

CHAPTER XVI

THE FIRST YANKEE CLIPPER

THE story of the American clippers is manifestly of growing rather than of waning interest to American readers, for it has appeared in our magazines bristling with the records of day-runs and of passages from port to port at intervals ever since the last of the mighty fleet was deprived of her wings and set at work as an alongshore tow-barge. The newspaper editor who discusses any feature of our modern oversea commerce usually adorns and emphasizes his argument by a reference to the days "when our ships dominated the Seven Seas"; and in doing so he assumes that every reader already knows the facts well enough to appreciate the force of what he says. Perhaps it is safe to say that certain features of the story of the clippers are as well known to ordinary readers as any chapter in American history.

Nevertheless the records at Stonington, though few in number, add some facts of interest to those already printed in connection with the clipper era. In order to make the story clear it seems advisable to explain exactly what is meant herein when the term clipper ship is used and to define the period called the clipper ship era. The word clipper was first applied to the swift privateers built at Baltimore during the War of 1812. It was derived, of course, from the verb clip which means to cut or shorten. The Baltimore clippers certainly did shorten the time theretofore required to sail a sea mile.

As used here the word clipper is applied to a class of carriers which were built at first especially for the China trade. After the discovery of gold in California the fleet was rapidly enlarged for use in the trade to San Francisco. All of these ships were designed for high speed instead of great cargo capacity. They were not yachts, built solely to break speed records; they were cargo carriers built for profits. Speed was considered more desirable than cargo capacity solely because of the well-founded belief that speed would bring more profits than a slow ship of great capacity; and never was the theory that profit and progress go hand in hand illustrated more clearly than in the evolution of these ships.

Thus, the first ship built for speed instead of capacity was the Ann McKim, of 493 tons, owned by Isaac McKim, of Baltimore, and launched in 1832. She had live oak frames, mahogany deck finishings, with no end of brass work, and was copper fastened. The cost was excessive and because she had a sharp model her cargo capacity was relatively small. She therefore made less profits than the other ships in the trade and was regarded by other ship merchants

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as an example to be avoided rather than imitated. She therefore had no influence in bringing on what

is called the clipper era.

The plans for building the China clippers (two in number) which initiated the clipper era were drawn in 1843. One of the ships was launched in May, 1844; the other in January, 1845. Both were larger than any ship previously in the China trade, and both were of refined model. In spite of sharp models, however, both proved to be immensely profitable. Their owners therefore at once built others to similar models. These proved to be still more profitable and the profits being in considerable measure due to speed, other merchants were led to consider the advisability of building similar ships. The urgent demand for tonnage which followed the discovery of gold in California and the still more urgent demand that the ships in this trade should be swift—the fact that speed added greatly to the profits of tonnage in this trade—was the final impulse which brought the clipper ship evolution to its zenith of splendor in size and speed. Indeed, builders and merchants lost all sense of proportion and built beyond the needs of the period so that profits fell off; whereupon there was a return to what may be called the capacity model. But marvelous speed records were made, and European merchants and builders were compelled to acknowledge the supremacy of American ships in the longhaul trades as they had previously acknowledged that supremacy on the North Atlantic.

In the meantime, certain schooners and brigs which had been engaged in the coasting trade of China had been called clippers because they had been modeled for speed rather than capacity. Speed was absolutely necessary to profits in that trade, for the vessels had to beat against powerful currents and dodge pirates. These vessels are of interest here not because they were a part of the great fleet of American clippers, properly so called, but because the profits which they made led Captain Palmer to design and build the first of the China clippers that was put in commission.

Let it be said once more than the clippers composed a distinct fleet. The packets were passenger carriers, sailing on schedules. The clippers were cargo carriers only (a few passengers were carried on some of them) and they sailed when loaded. The packets in their record-breaking passages probably attained speeds up to fifteen knots an hour, though the records do not give the exact facts. Several of the clippers exceeded eighteen knots an hour and the log book of the *Lightning*, quoted by Capt. Clark in his "Clipper Ship Era," says she dragged out twenty-one knots in one heave of the log.

If these statements need be argued no further now, we will consider how it happened that a demand arose for improved ships in the China trade, where the first clippers appeared. The American trade with China was opened when the ship Empress of China, Captain John Green, sailed from New York (February 22, 1784) for Canton with a cargo, the principal item of which was ginseng roots—14,666 pounds, worth in Canton a dollar a pound on the average. The passage out was covered in 174 days. An old account of her arrival says "it is pleasing to notice the courtesy with which the Americans were welcomed" at Whampoa, Canton's seaport. There were thirty-four ships (seventeen British) at anchor there and every one of them fired a salute when the Yankee, with her flag flying, came to join them.

After exchanging her ginseng for tea and other goods the *Empress* sailed home in 135 days. The account quoted says "the profits of the voyage were \$30,000, upwards of 25% on the capital employed." The merchants of that day thought 25% a small return on a voyage requiring a year's time, but they persisted in the trade because they observed that with added experience and a larger capital they could make more. By 1792 they considered the trade well established because the American import of tea, during that year, amounted to 2,614,008 pounds, a part of which was received in exchange for seal skins taken in the Cape Horn region.

Thereafter, by irregular advances, the amount of tea imported increased to 20,000,000 pounds, worth \$5,427,010, in 1841. In that year 35 American

ships of the average size of 390 tons were employed in our trade to China.

The distance from New York to Canton, as the ships sailed, was around 14,000 miles and the time required for a voyage (out and back) was about one year. It was obvious that if the length of time consumed could be shortened the expense would be decreased. The fact that tea deteriorated during a long passage was another inducement to shorten the time required. The new crop tea, called Young Hyson, consisting of the partially developed leaves, was especially subject to injury. A simple calculation showed every tea merchant that if a cargo of this new crop could be landed in New York say a month ahead of the coming of the fleet, the owners would make a profit of from 100% to 150% on all the capital used in the venture. And yet down to the year 1843 but one tea merchant of the United States had built a ship that was especially designed to make such swift passages as that.

In view of the competition between American tea merchants, and of what had been done in the way of increasing speed among the Liverpool packets, the continued use of relatively slow little 400-ton droghers in the tea trade seems at first thought discreditable to the merchants. But an explanation of this conservatism is found in the extent of the trade. Large ships were not needed. The 20,000,000 pounds imported in 1841, reduced to deadweight tons, was but little more than the weight

carried by ten such ships as the packet Roscius; and yet this total of 10,000 tons was, of course, distributed among all the 35 ships in the trade. To build a ship large enough to give a material increase of speed in the long passage was not attempted because even the larger ships in use came home with less cargo than they might have carried.

Beginning in 1839, however, events occurred in China which gave an entirely new aspect to the trade. In that year the Chinese Government began trying to exclude opium from the realm and thus brought on what was called the Opium War with England. During 1842 the Chinese were beaten and they made peace (August 29) by ceding Hong Kong in perpetuity to the British and by paying an indemnity of \$21,000,000. They also opened to foreign trade four ports in addition to Canton.

In the American view the most important result of the war was the opening of the additional ports to foreign trade. It was like "the discovery of a new continent, ready peopled with a rich, industrious" race; it was "one of the greatest commercial revolutions that ever took place." So said Hunt's Merchants' Magazine. "Moreover," said Hunt, "the march of events will ultimately give the United States the mastery" in the trade.

It was on January 4, 1843, that Captain Palmer sailed for Canton in command of the *Paul Jones*. Some of the events of the Opium War had been

described, of course, in the American newspapers, and the American people—more especially those engaged in the China trade—were greatly interested in the results expected to follow. It was therefore natural that Captain Palmer should make a careful study of the commercial conditions prevailing in Asia while he was at Canton.

He perceived first of all that American trade with China would be increased by the opening of the new ports quite as rapidly as that of the British, if not more so; for while the Chinese did not refuse to trade with the British they favored the Americans whenever possible.

The opium trade received the captain's especial attention, partly because it had led to the war, but chiefly, perhaps, because a swift little American brig named the Antelope, belonging to the owners of the Paul Jones, was engaged in it. The opium was a product of India and the principal port of shipment was Bombay. The Antelope was plying between Bombay and Canton, making large profits. Captain Palmer perceived that the opening of four more China ports would give opportunity for at least one more swift Yankee ship in the opium trade. For the trade would inevitably increase and it was the speed of the Antelope that made the merchants favor her. Having designed four splendid packets in the Dramatic Line, Captain Palmer was confident that he could build a ship for the trade between Bombay and, say, Shanghai, the principal of the new ports, that could hold a lead over all others on the coast of Asia.

Now, it happened that when Captain Palmer had loaded the Paul Jones for New York, a man named William H. Low, with his wife, engaged passage. Mr. Low was a brother of Abiel Abbott Low, of the New York tea firm of A. A. Low & Brother (there being only two of the brothers then in the business). He was one of the firm of Russell & Co., Hong Kong, and on the way home he and Captain Palmer discussed the foreign trade of China from every point of view. The kind of a ship needed—the size, model, rig and so on-was a matter of special interest to them. As a result of these discussions the two eventually agreed that larger ships than those already engaged should prove more profitable, and they then concluded that, as an experiment in the growing trade, a vessel designed for the opium trade between Bombay and some port in China would have more chances for profit than any other.

In a letter which Captain Palmer wrote to A. A. Low on August 8, 1875, he referred to this matter as follows:

"At the period of my first visit to China the opium trade was in full tide of prosperity. The Antelope and other clippers were running between Bombay and other Indian ports, making large freights and doing a fine business; and it did not appear that any material change would take place for years to come.

Your brother and myself came to the conclusion there would be a good opening for a fast clipper in the opium business between China and Bombay, and we decided to carry out the enterprise on our arrival home. I was to take one-quarter interest and he was to take care of the other three-quarters. He stated that he had no doubt but you would be interested in the enterprise on arrival home in October, 1843.

"I had not the pleasure of knowing you at this time. I was taken by your brother William to your place of business in Fletcher Street, and formally introduced. When the project was made known you readily approved of it, and authorized me to contract for a suitable vessel.

"I went immediately to Messrs. Brown & Bell, the most eminent shipbuilders in the city and contracted with them to build a brig 120 feet long, 13 feet deep and 28 feet beam, making a vessel of 450 tons, costing for hull and spars \$16,500. Before the model was finished and the vessel begun it occurred to me that a vessel of the shape and dimensions as above would be unsuitable for any other purpose than the opium trade. Consequently I suggested to enlarge the dimensions to a vessel 132 feet long, 17 feet depth of hold and 32 feet beam, which was approved of, and [I] was authorized to ascertain what the additional cost would be. I immediately called on Mr. Brown and asked what the additional cost would be. He said:

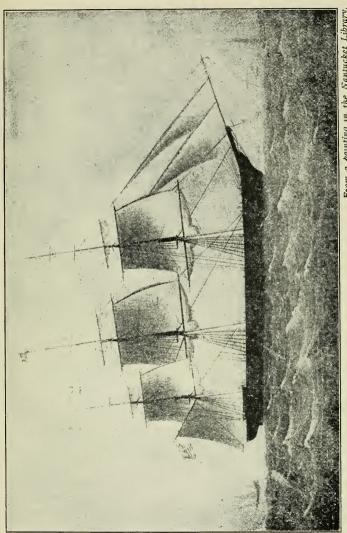
"'That is just such a vessel as I want to build, and I will do it for \$3,000 additional.'"

The increase of cost was approved by Mr. Low and the ship was then "built and fitted out under my supervision, and all contracts were made by me from keel to truck," to quote still more from the letter.

Captain Charles P. Low (a brother of A. A. Low), who later commanded three different clippers designed by Captain Palmer, writes in his autobiography, "Some Recollections," as follows regarding this ship:

"Soon after I left home for London my brother William came home from China with Captain Nat Palmer, in the ship Paul Jones. During the voyage Captain Palmer had made a model of a clipper ship and my brother took him to my brother Abbot and persuaded him to have a ship built after the model. It was to be built like a man-of-war, with solid bulwarks and pierced for sixteen guns—eight on a side. She was to be very fast. This vessel, when I returned from London, was being built at Brown & Bell's yards."

The exact day in October, 1843, when Captain Palmer called on the Lows in connection with this ship is not recorded, but the contract for the ship was signed about November 1. The captain says distinctly that she was the "first clipper ship built



From a painting in the Nantucket Library.

Named after the founder of the house of Russell & Co., the largest of the American firms in China. The "Samuel Russell"



for commercial purposes" and that she sailed for China, "admired by all," in June, 1844.

That the Houqua, as this ship was called, was one of the clipper fleet, as claimed by Captain Palmer in the above letter, is distinctly asserted by several periodicals published while she was in commission. For example, in a description of the clipper ship Staghound, which was published in the Monthly Nautical Magazine, dated August, 1855, by John Willis Griffiths, the editor, are the following statements:

"The construction of this ship may be said to mark the introduction of the late clipper era to Boston. The building of fast vessels for foreign trade had for several years been adopted in New York, having been first undertaken by William H. Aspinwall for whom Smith & Dimon constructed the clipper ship Rainbow, in 1843, which was followed by the Houqua and Samuel Russell, by Brown & Bell; and the famous Sea Witch, also built by Smith & Dimon. . . . Such was the condition of enterprise in New York for several years before Boston awoke to distinguish herself in clipper building, and give to the world many of the fastest fleets and largest ships in commercial service."

When Griffiths spoke of "building of fast vessels for foreign trade" he meant to say for the longhaul trade, beginning with that to China, in order to distinguish these ships from those employed in the packet trade of the North Atlantic. He then continued:

"The bold mind of Donald McKay grew restless under the idea that a sister city was monopolizing the construction of fast vessels, and for many years he urged Boston merchants to enter the lists with Messrs. Aspinwall, Captain N. B. Palmer and others, and dispute for the palm of speed."

Editor Griffiths was the designer of the two ships, Rainbow and Sea Witch, built by Smith & Dimon, of which he made mention, and his statement that the Houqua was a clipper is therefore conclusive evidence that she was so.

Another quotation which seems worth giving here is found in an essay, entitled "Ships, Models, Shipbuilding, &c.," which was printed in Hunt's Merchants' Magazine, in February, 1848. The unnamed writer considers at length certain innovations in models which had appeared in recent years and the arguments for and against them. These innovations had been introduced by Editor Griffiths, who supported them with mathematical calculations which the ordinary shipbuilders could not make. The writer of the essay was unconvinced by the scientific calculations, and he was still doubtful after considering the speed records of the two Griffiths' clippers, Rainbow and Sea Witch. In fact, his chief object in writing the essay was to prove that "experience, judgment and talent are requisite," and in fact were more important, when a fast ship was to be designed, than "science and mathematics."

In the course of his argument he wrote as follows:

"The Houqua, Coquette, Crusader, Valparaiso, Paul Jones, and other ships were not built by mere science and mathematics; and yet few vessels built at navy yards equal them."

The fact that the *Houqua* came to the mind of this writer first of all shows, of course, that she was a noted ship in 1848, and that was at a time when new records for speed were the chief topic of conversation in New York City.

No writer has ever disputed the claim that the *Houqua* was a noted clipper, but it has been said by modern writers that the *Rainbow* was the first of the famous fleet, while Captain Palmer asserted that his *Houqua* was first. The question at issue is therefore primarily one of dates only. Was the *Houqua* the first ship to enter the China trade or was the *Rainbow?*

In the letter previously quoted, Captain Palmer says that the contract for the *Houqua* was signed the first of November, 1843, and that she sailed for Canton in June, 1844. To support these statements of fact there is a list of the ships built by Brown & Bell, between 1821 and 1847, inclusive, which was printed in the *Merchants' Magazine* in December, 1848 (p. 643). This table says that the *Houqua*, of 706 tons, was launched in 1844, and

was the first of two that were built there during that year. Searches have been made in files of the New York Herald and other New York periodicals and in the records of Lloyds' "Register of Shipping" for the exact date when the Houqua was launched, but without avail. Nor was the exact date of the launching of the Rainbow found. But it is not doubted that the Houqua went affoat some time in May, 1844. As to the Rainbow it appears from various accounts that her keel was placed on the blocks early in 1843—certainly several months before the keel of the Houqua was stretched. But because of disputes between William H. Aspinwall, the owner, and John Willis Griffiths, the designer, the work of building her was delayed so long that she was not launched until January, 1845. The most interesting of all the magazine histories of this ship which have been printed was written by William Brown Meloney for the Saturday Evening Post, of Philadelphia. It appeared on February 26, 1916, and the following is quoted by permission:

"So it was not until a cold and cheerless morning in January, 1845, that the *Rainbow*, whose keel had been laid nearly two years before, was ready to leave the ways. . . . The *Rainbow* sailed in February for China."

Meloney's statement is confirmed by Captain Clark's "Clipper Ship Era." It is therefore certain that the Rainbow was launched seven months after the Houqua had sailed for Canton.

CHAPTER XVII

THE GRIFFITHS CLIPPERS

HILE the records show that the Rainbow sailed for China long after the sailing of the Houqua, it must be obvious to the reader that in any consideration of the relative influence of the two ships upon the evolution of the clippers the character of each as a cargo carrier is of more importance than the date on which each was commissioned.

Perhaps it should be said, first of all, however, that while Griffiths and Captain Palmer differed in their opinions of models, their personal relations were friendly. The references to Captain Palmer's work which Griffiths wrote in the Nautical Magazine are conclusive evidence that their rivalry, such as it was, was entirely devoid of personal ill will. There was, indeed, no occasion for any such feeling, for each was amply supported by the ship owners of the coast, and the results obtained by each were unmistakably set forth in the records of the ships and the bank accounts of the owners.

Because there were two distinct lines of evolution in the development of the clippers—rather say two lines of models—the variety which Griffiths origi-

nated shall have first consideration here. The fact is that the circumstances under which this naval architect became prominent, as well as the records of the ships he designed, indicate attention herein to his work as a designer ahead of that of Captain Palmer.

In 1841 John Willis Griffiths was a draftsman in the employ of Smith & Dimon, then well known ship builders. He was a man of education—able, for example, to calculate the displacement of a ship, the center of gravity of her hull and the center of effort of her sails, all from her plans.

His work as a draftsman naturally made him entirely familiar with models of the swift packets of the day, but while these vessels were acknowledged to be superior in all respects to the competing ships, Griffiths became convinced that in certain features of the hulls they might be greatly improved. At a meeting of the American Institute in 1841, he delivered a lecture, illustrated with drawings, by which he sought to prove that existing models were defective. His effort attracted little attention but a year later he came again, this time with a model, and repeated his criticisms. For this lecture he was jeered.

Griffiths, however, had the admirable quality of persistence. He sought and secured opportunities for explaining his views in public, until he obtained as a respectful listener one of the most enterprising merchants in New York, Mr. William H. Aspinwall, the one who, later, built the Panama Railroad. Aspinwall believed that American trade with China would be greatly increased by the results of the Opium War, and soon after hearing, early in 1843, that four ports had been opened in China, he determined to build for the trade a ship of about 750 tons—much larger than the average of those previously engaged in it. He knew, of course, that a swift ship was most desirable, and, having been favorably impressed with the views of young Griffiths, he was persuaded to sign a contract with Smith & Dimon for a Griffiths model. The name Rainbow was given to the ship to express the hope that her size as well as her speed would suit the trade; for a ship of her tons was as yet experimental.

Consider, now, the peculiarities of model for which Griffiths contended. As editor of the Nautical Magazine, later, he wrote a number of articles in which he set forth his views of models. Thus, in describing the Lightning, built by Donald McKay, of Boston (McKay had been converted to the Griffiths views), the following words were used:

"No timid hand or hesitating brain gave form and dimensions to the *Lightning*. Very great stability; acute extremities; full, short midship body; comparatively small deadrise, and the longest end forward, are points in the excellence of this ship."

To secure "acute extremities" the underwater lines at each end were made concave instead of

convex—she had hollow water lines, to use the vernacular. The bow was comparable to an old-fashioned, hollow-ground razor. One may imagine that Griffiths conceived this shape for bow and stern while shaving.

Donald McKay, as noted above, adopted the Griffiths view. Another notable designer who did so was George Steers, who designed the famous yacht *America*. The *Rainbow* and the *Sea Witch* were the only ships of Griffiths design which became famous, but Donald McKay turned out a great fleet which made most remarkable passages.

But Griffiths certainly had much trouble with the first of his ships. As already intimated the launching was delayed nearly two years. The designers of the ordinary models continued jeering the new model after Aspinwall signed the contract, and the newspapers printed the criticisms. Aspinwall was greatly affected by the adverse comment and made many efforts to induce Griffiths to yield to the clamor, but without avail. He even sent to England for a sail plan for use on the new ship—that too, although the American packets had a lead on the Atlantic which England had never disputed. Griffiths was obliged to accept this plan without open protest, but he nevertheless used his own when the spars were set and the sails were made; and so at last the Rainhow as launched was his in model from truck down to keel.

Meloney notes in the Saturday Evening Post that

the Rainbow cost Aspinwall \$45,000, which the reader may compare with the \$19,500 which the Lows and Captain Palmer paid for the Houqua; for the percentage of profit made on any venture is figured, of course, from the original investment.

But when at last the Rainbow sailed from Sandy Hook on her way to Canton, the troubles of John Willis Griffiths as a designer were at end; for she proved to be a swift and profitable ship. The record of her passages to and from Canton in her maiden voyage have been lost but in her second voyage she beat her way against the northeast monsoon and arrived out in 92 days while her homeward passage was made in 88 days. She was thus only 180 days at sea in this voyage. Better yet she made,

it is said, a profit of 100% on her cost.

In the magazine stories of the clipper era it is commonly asserted that the short voyages of the Rainbow led to the building of the next Griffiths clipper, the Sea Witch. As a matter of fact the Rainbow's passages were, as said, wonderful, but they did not break the speed record. They did not even equal the record of the Houqua. A ship named the Natchez, to be described in another chapter, had set a pace which but one ship ever equaled on the Canton-New York route, and it was the work of the master of the Natchez, Captain Robert H. Waterman (Captain "Bob"), that led Howland & Aspinwall to build another sharp-hulled ship for the China trade. Waterman went to the yard of Smith &

Dimon to superintend the construction of this ship, but Griffiths drew her plans. She was launched under the name of Sea Witch. She was 170 feet long, 33 feet, 11 inches wide and 19 feet deep. She measured 890 tons. She sailed for China on December 23, 1846, and poked the golden dragon on her cutwater into the harbor of Hong Kong 104 days later. She then came home from Canton in 81 days, which was not the record run, though really a wonder.

In her second voyage the Sea Witch made Hong Kong in 105 days and then on her return broke all records and made a new one which stands to this day; for she arrived in New York at the end of 77 days from Canton. A picture of this ship under all sail including royal studding-sails, which was used to illustrate Captain Arthur Clark's "Glimpse of the Clipper-Ship Days," in Harper's Magazine, dated July, 1908 (copyrighted), was labeled "The Swiftest Clipper of Her Day."

Griffiths always declared that the Sea Witch had more influence upon the models of the clippers built thereafter than any other ship of the period. Just how far this claim was justified cannot now be determined, but it is certain that Griffiths' chief ideas were adopted by Donald McKay, and that McKay built more clippers which became famous for speed than any other shipbuilder of the era.

It is therefore proper to give here, in connection with Griffiths' work, the records made by some of the McKay ships which were built to the Griffiths model.

The Lightning, mentioned above as having dragged twenty-one knots of logline from the reel during one turn of the glass, made the record run for twenty-four consecutive hours—436 miles. Perhaps it should be said here that every use of the word mile in this book means a sea mile, 6,080.27 feet long, and not a land mile which is 5,280 feet long. McKay's Sovereign of the Seas, commanded by Captain Laughlan McKay, a brother of Donald, in a run of 82 days from Honolulu to New York, covered (in March, 1853), 3,562 miles in eleven consecutive days. She crossed from New York to Liverpool in 13 days and 19 hours. Later, in a passage from San Francisco to New York, she covered 6,245 miles in 22 days.

The Flying Cloud, built by McKay for Enoch Train, of Boston (she was commanded by Captain Josiah P. Cressy), made the record passage from New York to San Francisco in 84 days. The record from San Francisco to New York, 76 days, was made by three different ships—the Comet, the Northern Light and the Trade Wind. The record voyage around the world, 132 days between ports, was made by the James Baines, a McKay ship, beginning December 9, 1854 (Meloney).

In connection with these records consider two extracts from log books of clippers which are printed in Clark's "Clipper Ship Era." On February 1,

1850, the Great Britain, Captain Philip Dumaresq, "passed a ship under double reefs with our royals and studding sails set." On June 16, 1854, the James Baines, while sailing 17 knots an hour under skysails, passed a ship named the Libertas under double reefed topsails. Can any one now imagine the feelings of the captain of the Libertas as he saw that glorious Yankee clipper sweep past the hulk he commanded?

With the records of the two Griffiths ships, Rainbow and Sea Witch, before them, together with those of the McKay ships Lightning, Sovereign of the Seas and Flying Cloud, it was entirely natural that writers should have believed that the Griffiths model was "the one which the sea liked best." Nevertheless, if all the facts in the clipper records be considered in connection with modern, or say later, usage in the design of swift models of the sail, it can be demonstrated beyond dispute that the chief feature of those swift clippers—the hollow water line-was a positive detriment. The ships made short passages because of certain other features of model and construction, and because of the way they were handled. But before going into a discussion of these technical points of ship construction the clippers designed by Captain Palmer, and their records, must have consideration.

CHAPTER XVIII

THE CAPTAIN AND HIS FLEET

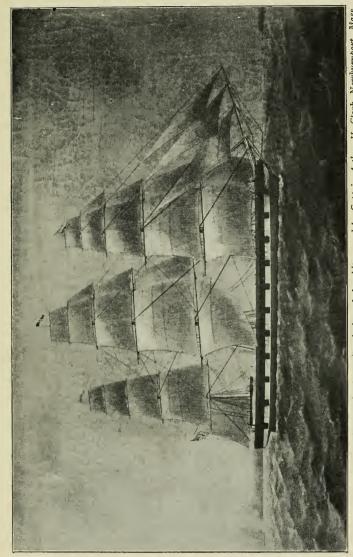
THE name Houghange, which was given to the first ship of the great American clipper fleet, was that of a native merchant of The foreign trade of Canton was done by a dozen natives who owned big warehouses called hongs, and who were known as merchants. The emperor held them responsible for all import duties and they were in several ways men of much importance. The twelve were under the command of one known as the senior hong merchant, and the one who held this post in 1843 was named Houqua, a man who was famous for "sound judgment; true prudence; wary circumspection and a wise economy," to quote an appreciation printed in Hunt's Merchants' Magazine. Moreover "his predilections were American."

While the ship was on the ways, a beautiful full-rigged model of the *Houqua* was made to carry as a present to the merchant, but he had died in September, 1843, before her keel had been laid on the blocks. The model was delivered to his family.

In her first voyage, Captain Palmer commanded the *Houqua*, with Thomas Hunt as first mate, William Gardner, second mate, and Charles P. Low, third mate. Low, in his autiobiography, mentioned above, naturally had much to say about the ship and her officers. He had already made a voyage to China in a ship called the *Horatio*, the fastest ship in the China trade (1842), "but she could not make over ten knots an hour."

While the exact date of the launching of the Houqua is not given, he notes that "Captain N. B. Palmer had no superstition as to Friday being a bad day to sail, though at that time sailors objected to going to sea on Friday and many merchants were superstitious enough to wait for Saturday and even Sunday before sending their ships to sea. The Houqua was launched on Friday, was towed down town on Friday, went to sea on Friday and arrived in Hong Kong on Friday, but she was a very lucky ship for years, at any rate."

The ship was loaded at Peck Slip. "Times had changed in the short interval since my coming home in the Horatio." (A change due to the Opium War.) "Then the ships went out with almost no cargo but lead and coal, and now our ship was loaded with pig lead, lumber, cotton sheetings and naval stores—pitch, tar and turpentine. She was full, so there was no 'tweendecks for the sailmaker, carpenter and boys. The boys had to go to the forecastle with the men and a house over the main hatch was fitted for the third mate, carpenter and sailmaker.



Photograph of an oil painting of the ship owned by Captain Arthur H. Clark. Newburybort. Mass. The "Houqua."



It was a good sized room and very comfortable.
... We had quite a number of passengers.

"We had a good sendoff by our family and a large number of friends who went down the bay with us. . . . Captain Palmer was a rough old sailor. He was determined to see me get along, and helped me more than any other man to know my duty as an officer and to fit me for a master. . . . Besides teaching me seamanship, Mr. Hunt, with the captain's knowledge, had me take my quadrant and take the sun at noon and work up the latitude by observation and find the latitude and longitude by dead reckoning. The captain is the only one who finds the longitude by chronometer. . . . Captain Palmer and Mr. Hunt got along splendidly and of course everything went off happily. . . . Mr. Hunt was a jolly fellow and apt to make too free" with some kinds of captains, but "Captain Nat Palmer rather enjoyed his wit and stories."

"The ship made a fine passage of 72 days to Anjer, where we laid in a stock of chickens, turtles, yams, bananas, oranges, and mangusteens. Captain Palmer was a believer in good feed, not alone for the cabin; he believed in giving the sailors the very best of salt beef and pork, and plenty of it; and everything else they had to eat was of the very best. . . . Here we filled our casks with fresh water brought by the natives. After doing this we proceeded up the China Sea and sailed into Hong

Kong, 84 days from New York, a splendid

passage."

The Houqua was soon ordered to Whampoa (12 miles below Canton), where all ships were loaded from Chinese boats that came down from the city. It was custom of the ship captains to go up to the city to live while waiting for cargo, but Low says that "Captain Palmer was very fond of his ship and would rather live on board at Whampoa and have company than stay in Canton. . . . He had a room on shore assigned to him and was welcome to stay as long as he liked; and when he did go up he had a fast sampan, or Chinese boat, to take him up and bring him back.

"All the ships had to lie a long time in port, and after the rigging was overhauled and tarred down, and all was painted aloft, the hull was painted inside and out, the deck was holystoned as white as snow, and then everything was kept in splendid order."

Unhappily for the peace of the second mate of the Houqua, however, the sailors had a pet monkey that was, on a certain Saturday afternoon, fastened on the bowsplit within reach of a 50-pound keg of black paint. "Like a monkey, always full of mischief, he upset the paint, which ran down the scuppers as far as the mainmast and over the clean white deck. The second mate caught the monkey and swabbed the paint up with him till he would hold no more, and then threw him overboard. But

this made matters worse, for the monkey caught the side ladder and came up; and before any one could stop him ran the whole length of the bulwarks leaving black paint all over the fresh straw-colored paint, and making an awful mess."

As the ship had to be immaculate for Sunday all hands turned to and cleaned up the mess the monkey had made, and when this had been done the beast

was shaved, washed and forgiven.

The Houqua's passage of 84 days to Hong Kong was then the shortest on record and it has not often been equaled since then. She left for New York on December 9, 1844, and arrived in 90 days. A year later she made the passage home in 91 days.

In connection with these two passages home, observe that the famous Flying Cloud, which made the record run of 89 days from New York to San Francisco, used 94 days in making her shortest passage from Canton to New York and 96 in making her next best run on the route. The Comet, that made the record of 76 days from San Francisco east, was 99 days making her best run from Canton to New York. The Houqua, though smaller than either of these splendid flyers, was therefore manifestly a peer.

It may also be noted that the total number of days passed at sea by the *Houqua* during her first voyage was 174. The *Rainbow* in her second and most famous voyage was 180 days at sea. Captain John Land of the *Rainbow* boasted, after com-

pleting her second voyage, that she was the fastest ship on earth, and his boast was accepted thereafter by about all writers until Captain Clark published the record of the *Houqua* in "The Clipper Ship Era." The *Rainbow* never equaled the *Houqua's* record.

At the end of the first voyage Captain Nat left the *Houqua* to his brother Alexander, but he took command again for the third voyage, "taking his wife and a niece of his, Miss Fanning." Low was now the mate of the ship and his autobiography gives several interesting little sketches of the master. For example:

One day when "the ship was rolling fearfully... the captain put his head out of the cabin scuttle and asked me how the weather was. I told him it was more moderate just then, but thought it would blow again at 8 o'clock. He then said:

"'Mr. Low, shake the reefs out of the maintopsail, set the main topgallantsail and main royal, and let her roll over, shipshape and Bristol fashion, with all her canvas on her.' At eight it began to blow again and the captain put his head out of the scuttle and called out:

"'Mr. Low, take in the main royal, the main topgallantsail and close reef the maintopsail, and let her roll over and be damned to her.'

"He was very passionate," Low says. "In calm weather he would come on deck with an old white beaver hat on, take it off and stamp on it, and damn

the calm and everything else. But he never abused the men."

Because so much had been said in novels of the sea about the cruelty of the officers of American ships in the clippper days, perhaps an actual use of force upon an American ship may be described. With Captain Charles Porter Low in command, the Houqua sailed from New York for China on April 6, 1849, and a large party of friends of the Lows and of Captain Palmer went down to Sandy Hook with her to celebrate her departure. As it happened, sailors were scarce in New York, at that time, and the crimps had made up the crew of the Houqua from such men as could be scraped up. As the ship approached Sandy Hook the sailmaker went to his room and refused to come out and go to work when ordered to do so by the mate. Thereupon the mate took him by the throat and dragged him forth.

This use of force overcame the man's obstinacy, but when the pleasure-seekers saw the mate use force, they were so badly shocked (although the man was not beaten) that Captain Nat Palmer felt obliged to bring the *Houqua* to anchor, take the mate back to New York and bring another in his place. The *Houqua* was actually detained several hours in order to replace a mate who had used force to compel an obstinate seaman to do duty.

Low mentions once more the unusual drilling he received in order to fit him for the command of a ship. He not only worked out the longitude by

the chronometer but he was allowed to put the ship about in all kinds of weather. In short he had full command of the deck. He was 22 years old at the time.

Of the captain's strength of body Low wrote: "If it was necessary he could stand any fatigue and exposure and I am quite sure that" his allowing Low to manage the ship "was to teach me confidence in myself and also to give me experience."

Speaking of five passengers in the cabin—all young men—Low says:

"They had plenty of liquor on board and almost every evening they would get on deck and sing songs and spin yarns until 10 o'clock, when they had to retire, for no lights were allowed after that. Captain Palmer would always absent himself till they got through their fun, but he never objected."

The most remarkable passage of the *Houqua* was that made in a run home from Shanghai in 1850. The *Houqua* was then six years old and she had been driven to the limit of endurance during all her life. She had theretofore been thrown on her beam ends in a cyclone and had been "strained and weakened," to use the words of Captain Clark in connection with the *Sea Witch* in one of her races. To those words Captain Clark added:

"Moreover, a wooden ship, after five or six years, begins to lose her speed through absorbing water, and becomes sluggish in light airs." In spite of handicaps thus described, the *Houqua* sailed home from Shanghai in 87 days, as a letter from Captain Palmer to his family said at the time. It was a record-breaking passage at the time, but the important fact in the run is that it shows she had been built for strength and endurance as well as speed. A further proof of her efficiency is found in the fact that she was a profitable ship in the long-haul trades until 1865, when she was lost in a typhoon in the China Sea.

This matter of endurance is of importance here because the influence of a ship upon ships built subsequently depends upon the profits made more than upon any one fact in her history. For profit, the Houqua was one of the most notable of her day because, first, she was efficient, and next because she cost comparatively little in the beginning. When the Houqua was built, A. A. Low & Brother occupied a small office in Fletcher Street. The profit made by the ship enabled them to move to commodious quarters in Burling Slip. The great profits made by her and the other clippers built by the firm created the great fortune for which they were famous. It was because these ships were profitable that Mr. Seth Low, son of A. A. Low, was able to give Columbia University a million dollars while he was at the head of that famous school.

Of course Captain Palmer shared in this prosperity. He did, indeed, receive only \$500 for designing and superintending the construction of each

ship the firm brought out, for that was a day of low wages; but he owned a quarter of the Houqua and he held shares—usually an eighth—in each one he built. It was because of his success as a ship owner as well as a ship designer that he came to be ranked as one of the foremost ship merchants in New York.

It was the profit made by the Houqua, of course, that led the Lows to build the Samuel Russell, of 940 tons. She was named for the head of the famous American firm of Russell & Co., of Hong Kong.

Captain Clark, in "The Clipper Ship Era," says, "She was a beautiful vessel, heavily sparred, with plenty of light canvas for moderate weather, and

every inch a clipper."

The Russell is frequently mentioned in the stories of the American clippers. For example, it is said that in her first passage out she required 114 days, a long time for a clipper; and yet on one day when she had a breeze she covered 328 miles in twentyfour consecutive hours, a distance that was then astounding. Better yet, in a run home from Canton in 1851 (when she was five years old) she covered 6,722 miles in thirty consecutive days, an average of 226 miles a day.

In one magazine, Captain Palmer is credited with this run but he was in New York at the time. He had recently sent the Contest afloat and was prepar-

ing to build the David Brown.

In the meantime the Russell had engaged in a famous race from New York around the Horn to San Francisco, in which seven clippers competed, the more famous of which were the Houqua and the Sea Witch. The Russell arrived out in 109 days, and thus broke the previous record by twelve days, but the Sea Witch made the passage in 97 days. The Houqua was 120 days on the way.

The Russell was commanded by Captain Charles P. Low, for this voyage, and his account of it seems worth quoting in part because it shows not only the quality of the Palmer design but how ships were loaded when freights were high. Low received letters, while in Whampoa, telling him he was to take the Russell on his return to New York, and the Houqua, on arrival at New York, was towed directly to the pier where the Russell had been taking in cargo. Low found Captain Theodore Palmer, a young brother of Captain Nat, temporarily in command of the Russell, and he was to take her to sea in case Low failed to arrive in time or refused to go in her.

Palmer at once inquired if Low would go in her and Low replied that he would. The narrative continues:

"He [Theo Palmer] then went on board the ship and ordered the mate to have all the sails taken out of the fore peak and put in the cabin to make room for more freight. The mate said:

"'Captain Low is going in the ship, is he not?" and Captain Palmer said:

"'Yes, he will take command.' The mate said:

"'I knew it, for if you were going this would not be done; for the ship is loaded now as deep as a sand barge.'

"And she was; her scuppers were not more than a foot out of water. There was plenty of freight offering and the ship had a freight list of nearly \$75,000, and she received a dollar and a half a foot, or \$60 a ton, for all she had on board. . . . On the 15th of January, 1850, I left the pilot at Sandy Hook, bound on a voyage around the world. We had a fresh wind from westward, and when we reached the Gulf Stream we found how deep in the water the ship was and how slowly she rose to the seas. The wind increased to a heavy gale and while running under close reefed topsails and a foresail, a sea boarded us over the starboard quarter." It swept the captain and the mate for sixty feet along the deck and landed the man at the wheel in the mizzen rigging. All the compasses in the ship were destroyed save a little one designed for small boats, "but we managed to get along and in twenty days crossed the line, . . . a great run of luck." Off Rio, a ship bound for San Francisco was overhauled and two compasses were borrowed from her.

Then came the Horn. Low was in waters with which he was unacquainted. "The barometer was

unusually low and I lost some days from carrying small canvas in preparation for gales that never came. . . . We had very high seas and the ship's deck was flooded, day after day. Sometimes she would go under water and it seemed as though she would never come up."

And yet she arrived in San Francisco in 109 days from New York, breaking the record, and the San Francisco newspapers issued extras in celebration of the event.

It is worth recalling that Low sailed the Russell into port without a pilot. The pilot hailed him off the Farallones and Low asked the price. The pilot replied \$8 a foot for the total draft of the ship, but he added in a reply to a question that if the ship entered without a pilot only \$4 a foot would be collected. The ship was drawing twenty feet. Low says he sailed in without a pilot in order to save \$80, but the context shows that he was animated by pride of achievement only. At any rate he declared that a captain who was worth his salt should be able to enter a port like San Francisco aided by the chart only, even though he had never seen it before. It was, in fact, characteristic of our sailors of the sail to handle their ships in ways requiring extraordinary skill and then airily declare that they were merely anxious to save some trifling sum of money.

In his summary of records of the California clippers Captain Clark divides the passage from

New York into sections and gives the records of various clippers in each section. The Great Republic, after she was rebuilt by Captain Palmer, as described in another chapter, held the honors for the passage from Sandy Hook to the Equator, having made the run in 16 days. The Samuel Russell made the shortest run from Cape St. Roque to 50° south latitude in the Atlantic in 16 days. The Young America made the record run from 50° south in the Atlantic to 50° south in the Pacific in 6 days. The Live Yankee and the Mary L. Sutton ran from 50° south to the Equator in the Pacific in 16 days, while the White Squall made the record from the Equator to San Francisco in 14 days.

The White Squall (1,118 tons) was "very similar in design and construction to the Samuel Russell and Oriental," according to Captain Clark.

If any ship had been able to equal the record over each of the sections (allowing two days for the run from the Equator to Cape St. Roque), she might have made the passage from Sandy Hook to San Francisco in less than 70 days.

The Russell endured the strains of hard driving until 1870, when she was wrecked in Gaspar Strait.

The most famous of the clippers designed by Captain Palmer was the Oriental, which followed the Russell in 1849. In one respect she was the most famous of all the clipper fleet, for it was when she appeared in London after a record run from Canton that the British for the first time, freely



Captain Nathaniel B. Palmer.



and cordially acknowledged American supremacy in the long-haul trades, as they had previously acknowledged our lead on the North Atlantic. The *Oriental* was 185 feet long, 36 wide and 21 deep. She measured 1,003 tons and she cost \$70,000.

The Oriental sailed from New York bound for China on September 14, 1849, under the command of Captain Theodore D. Palmer, a younger brother of Captain Nat. That he was abundantly able to sustain the reputation of the Palmer family was apparent after he had made two voyages in the Oriental. For his first return from Canton was made in 81 days, or only four days more than the record short passage. Because of the speed of the ship, and because of the record of the designer as well as that of the captain, the Oriental was next chartered to carry tea from Canton to London.*

On May 18th the ship sailed from New York for Hong Kong and arrived out in 81 days, breaking the record for the passage east. Then she took on a load of 1,600 tons of tea for London. No American ship had ever been chartered to carry tea from China to London. In fact, no Yankee clipper of any size had appeared in any English port, though, as Lindsay notes in his history, the records of the clippers were as well known in London as in New York. Young Captain Theo. Palmer knew very well how the seafaring population of the

^{*}The ship was loaded by Russell & Co., of whom Captain R. B. Forbes, of Boston, was then the head.

British capital would receive him if he were able to make a record passage, and he realized that he had other reasons for driving his ship to the utmost limit. In fact, he felt that the honor of the American merchant service was, in a very real sense, in his keeping. But while he thus had every inducement for vigilance and persistence he must have felt a sinking of hope when he was ready to depart, for an adverse change in the monsoon occurred before the ship was loaded.

Monsoon is the name given to the prevailing winds along the south and east coasts of Asia, and more especially the winds that prevail on the Indian Ocean at certain seasons.

"From October to April," says the Cyclopedia of Commerce, "a gentle, dry, northeast breeze prevails." It was against this gentle breeze that Captain John Land sailed the Rainbow in her second passage to Canton. "From April till October," continues the Cyclopedia, "a violent southwest wind blows, accompanied with rain."

Captain Palmer in his effort to make a notable passage from Canton to London was obliged to beat his way down the Asiatic coast and across the Indian Ocean against this "violent southwest wind."

It was a race against time. All previous recordbreaking passages from Canton had been made with studding-sails spread alow and aloft before the "gentle, dry, northeast breeze." The Oriental had to smash her way through adverse gales, but she

won. When the British clipper Challenger, in later years, made the passage in 113 days she was hailed as a superb sailer, and so she was; but the Oriental was driven to London in 97 days.

As Meloney says in the story already quoted:

"The Oriental was the first out-and-out clipper London ever saw. Photographs of her were printed; she became the subject of newspaper leaders adjuring Britishers to take a lesson from her or prepare to forsake the sea. . . . The Government copied her lines while she lay in drydock. Afterwards the lines of other Yankee flyers were taken off similarly, but the Oriental was the first inspiration of British builders, who, though they were to launch many beautiful cracks, never succeeded in producing one to vie with the American champions." (Italics not in original.)

Captain Nathaniel Brown Palmer was in London when the Oriental arrived, and a letter he wrote about the matter, said that Captain Theodore was "a Lion" in that port. He also brought home a copy of the Illustrated London News, dated December 21, 1850, which contained a picture of the Oriental, and the following:

"The Ship Oriental.

"Although many British ships have arrived at New York and Boston from China, since the alteration in the Navigation Laws, the first American ship (the Oriental) only arrived in the West

India docks on the 3d instant.

"The ship Oriental, of New York, Captain Palmer (above 1,000 tons), was built for the China trade: she sailed from New York on her first voyage, the 14th of September, 1849, and arrived at Hong Kong by the Eastern Passage, January 1, 1850, being 109 days. She discharged and took in a full cargo for New York, sailed 30th January, and arrived in New York April 21st, making eighty-one days' passage; discharged and took in full cargo, and sailed May 18th for Hong Kong; arrived August 8th, making eighty-one days' passage: discharged and took in full cargo and sailed for London, August 28th; beat down the China sea against the S. W. monsoon in twenty-one days to Anjer, and arrived off Scilly in ninety-one days, and into West India dock in ninety-seven days. A period of fourteen months and nineteen days has elapsed since she sailed on her first voyage from New York, since which time she has sailed 67,000 miles, and is now chartered to sail again for Canton, on 10th January, 1851. The above facts are taken from the log-book, by permission of Capt. T. D. Palmer, by M. J. Skiller of Wapping.

"We should add that the *Oriental* brings about 1,600 tons of tea at £6 per ton, whilst all the ships loading at Whampoa at the same time only got £3 10s. The bulk of her cargo is consigned to three

firms of the highest eminence, whose Correspondents availed themselves of the opportunity even at such a high rate of freight, the *Oriental* being known for her fast sailing qualities, which she fully verified.

"This is a severe lesson to our ship owners, and will show them that the British merchants abroad are still ready to pay high freights for superior ships.

"The main dimensions of the *Oriental* are: Length, 183 feet; beam, 36 feet; hold, 21 feet; poop deck, 45 feet; topgallant forecastle, 30 feet."

Lindsay, the English author of a "History of Merchant Shipping," necessarily gave considerable attention to the American clippers in the China trade. He says that beginning in 1845 "various vessels were despatched from New York and Boston to Whampoa [Canton's port] which surpassed ours in speed, having low hulls, great beam, very fine lines and with yards so square as to spread a far larger amount of canvas in proportion to their tonnage than any vessels hitherto afloat."

The names of the clippers which had especially attracted his attention were given (Vol. III, p. 292), in the following paragraph:

"There is no doubt that at this period there were few ships afloat which could rival in speed the Oriental, Challenge, Sea Witch, Flying Cloud and various similar vessels the Americans had sent forth to compete with us in the trade from China." In describing the effect of the *Oriental* upon the people of London Captain Clark's "Clipper Ship Era" says:

"Throngs of people visited the West India Docks to look at the Oriental. They certainly saw a beautiful ship; every line of her long, black hull indicated power and speed; her tall, raking masts and skysail yards towered above the spars of the shipping in the docks; her white cotton sails were neatly furled under bunt, quarter, and yardarm gaskets; while her topmast, topgallant and royal studdingsail booms and long, heavy lower studdingsail booms swung in along her rails, gave an idea of the enormous spread of canvas held in reserve for light and moderate leading winds; her blocks, standing and running rigging were neatly fitted to stand great stress and strain, but with no unnecessary top-hamper or weight aloft. On deck everything was for use. The spare spars, scraped bright and varnished, were neatly lashed along the water ways; the inner side of the bulwarks, the rails and the deck houses were painted pure white; the hatch coamings, skylights, pin-rails, and companions were of Spanish mahogany; the narrow planks of her clear-pine deck, with the gratings and ladders, were scrubbed and holystoned to the whiteness of cream; the brass capstan heads, bells, belaying pins, gangway stanchions, and brass work about the wheel, binnacle and skylights were of glittering brightness. Throughout she was a triumph of the shipwright's and seaman's toil and skill.

"No ship like the Oriental had ever been seen in England, and the ship owners of London were constrained to admit that they had nothing to compare with her in speed, beauty of model, rig, or construction. It is not too much to say that the arrival of this vessel in London with her cargo of tea in this crisis of 1850, aroused almost as much apprehension and excitement in Great Britain as was created by the memorable Tea Party held in Boston in 1773."

The London Times is quoted as follows:

"We must run a race with our gigantic and unshackled rival. We must set our long-practised skill, our steady industry and our dogged determination against his youth, ingenuity and ardor. It is a father who races with his son. A fell necessity constrains us and we must not be beat. Let our ship-builders and employers take warning in time."

The Yankee ship of the sail was at last the swaggering lord of all the Seven Seas, and it was a ship designed by Captain Palmer that compelled this final recognition of American ability. The captain had come late to the work of building up the reputation of the Liverpool packet fleet, but he led all others in spreading the fame of the clippers in the home of Britannia, the one-time (also the modern) mistress of the seas.

The next ship built after the *Oriental* to the captain's designs was named for him—the N. B. Palmer. She was one of the largest of his clippers—214 feet long by 39 broad and 22 deep. She measured 1,490 tons. Captain Clark wrote as follows regarding this ship:

"The N. B. Palmer was perhaps the most famous ship built in the Westervelt yard. In China she was known as 'the Yacht,' and with her nettings in the tops, brass guns, gold stripe and her lavish entertainments on the Fouth of July and Washington's Birthday, she well deserved the title. . . . A full rigged model of the N. B. Palmer was exhibited at the Crystal Palace, London, in 1851, and attracted much attention as a fine example of the American clipper type."

Captain Charles P. Low, who commanded this ship for several years, wrote as follows regarding her launching:

"Some time in March, 1851, the ship was ready for launching; she had all her spars aloft, royal and skysail yards crossed, and . . . no ballast but her chain cables in her hold. . . . A finer, handsomer ship never was built. . . . Captain Palmer, to my disgust, put me in charge of a steam tug, with a large number of young girls and men and women of his acquaintance, to go and see the launch-

ing from the water. I wanted to be launched in the ship. However, I had a jolly crowd to take care of, and we had a fine lunch, champagne and cigars, on board, and a better view of the launching than they had on shore. It was a splendid sight to see that huge craft slide down the ways. . . . After it was over . . . I went up to the ship yard and found the ship alongside the wharf, leaking like a sieve, and Captain Palmer in no good humor."

It was then too late to put her in drydock to examine her for the leak and so men were hired to pump her out during the night. Next day it was learned that an inch and a quarter treenail had been left out below the water line, "and a whole lot of water can be forced through such a hole."

The ship sailed for San Francisco on May 6, 1851, and arrived out without special incident in 107 days. A pilot took her in and anchored her three miles from her wharf. Low rowed ashore and met the owners' agent, "a Nantucket man and a regular driver," who "wanted to know why I had not brought the ship up near the wharf."

"The pilot refused to bring her any nearer," was

the reply.

"The ship must come up to the wharf."

"If she must she must."

Thereupon Captain Low went back to the ship where the pilot refused once more to take her to the wharf—why, is not told. So Low called all

hands and set all plain sail to skysails. The wind was light abeam. "We got under way and went along finely. I knew that sails would stop a ship as well as send her ahead and I kept every stitch of canvas on her. . . . As soon as I got near enough I backed the main vard and went along side so easily that there was hardly a jar. . . . A great crowd on the wharf cheered me most heartily."

The Palmer sailed from San Francisco to Canton in ballast, carrying 75 Chinese bodies as freight at \$75 per body. Her passage from Canton to New York was made in 84 days. In her next voyage the Palmer made her best records for speed. Beginning on the third day out of New York she covered 396 miles in twenty-four hours. On July 1, 1852, she overhauled the celebrated Flying Cloud that had sailed ten days ahead of her. The Flying Cloud eventually beat her to San Francisco but she left San Francisco ten days after the Flying Cloud and beat her to China. And she beat the Flying Cloud from Canton to New York.

In April, 1854, the Palmer loaded whale oil at Honolulu for New York and sailed on the 23d. She crossed the line in six days and rounded the Horn in thirty-eight "with skysails and royal studdingsails set. In 57 days we crossed the line in the Atlantic, a splendid passage. We were ten days ahead of the famous Sovereign of the Seas."

This is not to claim that the N. B. Palmer was

a swifter ship than either the Flying Cloud or the Sovereign of the Seas, but it is to say with emphasis that she was of their class—one of the swiftest of the clippers.*

Captain Low was one of the few captains of the day who carried their wives. Mrs. Low was a woman of remarkable beauty and whenever the ship was in port the cabin was a much-sought social center.

The Palmer was eventually sold in Europe.

The years 1850-1851 were memorable in the annals of Captain Palmer's life because of the building of another notable clipper, named the Contest. This ship measured 1,098 tons and for her size she was a splendid racer. Her record in the run from New York to San Francisco was 97 days, the same as that of the Sea Witch. In the return run to New York she sailed in a race with the Northern Light, which was bound for Boston.

The Contest covered the 16,000 miles in 80 days, but the Northern Light arrived at her destination in 78 days and 5 hours.

The Contest was one of the beautiful Yankee clippers captured by Captain Raphael Semmes, of the Confederate cruiser Alabama. The ship was burned off Batavia, while on her way from Yoko-

^{*}Mr. J. Murray Forbes, of Boston, is probably the only man now living who sailed in the N. B. Palmer. In 1863 he crossed from San Francisco to Canton in her, and passed through a typhoon that carried away some top hamper, but demonstrated that she was an excellent sea boat.

hama to New York, on November 11, 1863. Semmes described the capture and destruction of the ship in his "Service Afloat" as follows:

"It was now about two o'clock A. M., and the Alabama getting up her anchor, steamed out into the China Sea, by the light of the burning ship. We had thus lighted a bonfire at either end of the renowned old Strait of Sunda. After having thus advertised our presence in this passage, it was useless to remain in it longer. Ships approaching it would take the alarm, and seek some other outlet into the Indian Ocean. Most of the ships coming down the China Sea, with a view of passing out at the Strait of Sunda, come through the Gaspar Strait. I resolved now to steam in the direction of this latter strait, and forestall such as might happen to be on their way. By daylight we had steamed the coast of Sumatra and Java out of sight, and soon afterward we made the little island called the North Watcher, looking, indeed, as its name implied, like a lone sentinel posted on the wayside. We had lost the beautiful blue waters of the Indian Ocean, with its almost unfathomable depths and entered upon a sea whose waters were of a whitish green, with an average depth of no more than about twenty fathoms. Finding that I should be up with Gaspar Strait sometime during the night, if I continued under steam, and preferring to delay my arrival until daylight the next morning, I let my steam go down, and put my ship under sail, to take it more

leisurely.

"We were about to lift the propeller out of the water, when the cry of 'sail ho' came from the vigilant look-out at the mast-head. We at once discontinued the operation, not knowing but we might have occasion to use steam. As the stranger was standing in our direction, we soon raised her from the deck, and as my glass developed, first one, and then another of her features, it was evident that here was another clippership at hand. She had the well-known tall, raking masts, square yards, and white canvas. She was on a wind, with everything set, from courses to skysails, and was ploughing her way through the gently ruffled sea, with the rapidity, and at the same time, the grace of a swan. made her a point or two on our lee bow, and not to excite her suspicion we kept away for her, so gradually, that she could scarcely perceive the alteration in our course. We hoisted at the same time the United States colors. When we were within about four miles of the chase, she responded by showing us the same colors. Feeling now quite sure of her, we fired a gun, hauled down the enemy's, and threw our own to the breeze. (We were now wearing that splendid white flag, with its cross and stars, which was so great an improvement upon the old one.) So far from obeying the command of our gun, the gallant ship kept off a point or twoprobably her best point of sailing-gave herself topgallant and topmast studding-sail, and away she went!

"I had been a little premature in my eagerness to clutch so beautiful a prize. She was not as yet under my guns, and it was soon evident that she would give me trouble before I could overhaul her. The breeze was tolerably fresh, but not stiff. We made sail at once in chase. Our steam had been permitted to go down, as the reader has seen; and as yet we had not much more than enough to turn the propeller. The chase was evidently gaining on us. It was some fifteen or twenty minutes before the engineer had a head of steam on. We now gave the ship all steam, and trimmed the sails to the best possible advantage. Still the fugitive ship retained her distance from us, if she didn't increase it. It was the first time the Alabama had appeared dull. She was under both sail and steam, and yet here was a ship threatening to run away from her. She must surely be out of trim. I tried, therefore, the effect of getting my crew aft on the quarterdeck, and shifting aft some of the forward guns. This helped us visibly, and the ship sprang forward with increased speed. We were now at least holding our own, but it was impossible to say, as yet, whether we were gaining an inch. If the breeze had freshened, the chase would have run from us beyond all question. I watched the signs of the weather anxiously. It was between nine and ten o'clock A. M. Fortunately, as the sun gained power,

and drove away the mists of the morning, the breeze began to decline! Now came the triumph of steam. When we had come within long range, I threw the spray over the quarter-deck of the chase, with a rifle-shot from my bow-chaser. Still she kept on, and it was not until all hope was evidently lost, that the proud clipper-ship, which had been beaten by the failure of the wind, rather than the speed of the Alabama, shortened sail and hove to.

"When the captain was brought on board, I congratulated him on the skilful handling of his ship, and expressed my admiration of her fine qualities. He told me that she was one of the most famous clipper-ships out of New York. She was the Contest, from Yokohama, in Japan, bound to New York. She was light, and in fine sailing trim, having only a partial cargo on board. There being no attempt to cover the cargo, consisting mostly of light Japanese goods, lacker-ware, and curiosities, I condemned both ship and cargo. I was sorry to be obliged to burn this beautiful ship, and regretted much that I had not an armament for her, that I might commission her as a cruiser. Both ships now anchored in an open sea, with no land visible, in fourteen fathoms of water, whilst the crew was being removed from the prize, and the necessary preparations made for burning. It was after nightfall before these were all completed, and the torch applied. We hove up our anchor, and made sail by the light of the burning ship. Having now burned a ship off Gaspar Strait, I turned my ship's head to the eastward, with the intention of taking the Carimata Strait."

Semmes valued the prize at \$122,815. The American claim before the Geneva Board of Arbitration (Vol. III of the Reports, p. 348) was \$158,465.97. In May, 1876, A. A. Low, as attorney for the owners, collected \$66,994.96, "being the amount due" from the sum awarded to the United States for the Alabama claims, so-called. From this sum commissions and attorney's fees were deducted so that the owners actually received only \$47,465.75, of which Captain Palmer's share was \$5,933.22. He was the owner of four shares thirty-seconds. The Contest cost \$95,000 and was the most expensive clipper that Captain Palmer had built. She was nevertheless a highly profitable ship during her twelve years afloat. Her first cargo (May, 1851) yielded \$48,000 freight.

Of the David Brown, the largest of Captain Palmer's designs (1,715 tons), it may be noted that she made the New York-San Francisco run during 1854, in 98 days. Two years later she made it in 103 days. In Clark's list of twenty-six clippers that completed this run in less than 110 days the David Brown stands fifth, the Sea Witch seventh, the Contest eighth. The Comet, with the record of 76 days for the eastward run stands twenty-first in this

list.

In order to give an idea of the speed of the really short passages among the average of the whole American fleet engaged in the trade, it should be noted that (Hunt's Merchants' Magazine, Vol. 28, p. 623), only twelve vessels out of 161 made the passage from the East to San Francisco in less than 110 days during 1852. Among these only two were at sea less than 100 days. The Sword Fish required 92 days and the Flying Fish, 98. On the other hand, by way of contrast, twelve vessels required more than 200 days, among which the Alesto, from Boston, was on the way 295 days, and the John Jay, from New York, 270. The average of all arrivals, month by month, varied from 137.5 days in April to 161 days in November. As the total number of arrivals reported was 161, only a little more than 7% of the vessels covered the route in less than 110 days while only 1.2% arrived in less than 100 days.

CHAPTER XIX

GOOD QUALITIES OF THE CLIPPERS CONSIDERED

should have been included in all magazine stories of the Yankee clippers is one of the more interesting facts in the history of the clipper era; for the Natchez was in all respects a type the very reverse of the clippers. But of all the stories ever written about the ships of the deep blue sea the one that should be of most interest to naval architects is that which tells how Captain "Bob" Waterman drove the Natchez from New York to Canton and back at the very beginning of the clipper era. Indeed, the story, being brief, might well be printed in bold type on cardboard and hung on the wall of every school room used for instructing youths who would learn to design ships.

The Natchez was built in 1831 by Isaac Webb, for the Collins-New York and New Orleans packet line. In those days the water in the passes of the Mississippi was always shallow and every vessel trading regularly to New Orleans was built with a broad beam and relatively little depth. Because no such a model was supposed to be speedy, the hulls were designed to carry the utmost amount of cargo

possible, and that is to say the ends were as blunt as any afloat; for cotton was the most important item in the cargo and the hold of the ship was crammed full of it, the final bales in each tier being forced in with big screws.

In short, the Natchez had a model comparable with that of an Erie canal boat. One writer, speaking of her as she appeared in 1843, called her an "old flat-floored cotton wagon." Note that she was especially old, for the best of ships were reduced in grade for insurance purposes at the age of ten, and the Natchez was then twelve years old.

However, in 1843 Howland & Aspinwall took over the Natchez, placed her under the command of Captain Robert H. Waterman and sent her to Canton for tea. Captain Bob, as he was called by a great host of friends, had made a splendid reputation as a mate in the Black Ball packet line. He was now to have a remarkable career in the China trade. Taking the Natchez to Canton he loaded tea and brought it home in a passage of 94 days, a length of time which was exactly equaled, but never excelled by the celebrated clipper Flying Cloud.

In 1844, Captain Waterman took the Natchez by way of the west coast of South America to Hong Kong, where he arrived in the short time of 133 days of sailing. He then took on tea, and on January 15, 1845, or about the day when the clipper Rainbow was launched, he sailed for New York. He was off the Cape of Good Hope in 39 days and on April 3, just 78 days from Canton, he arrived in New York.

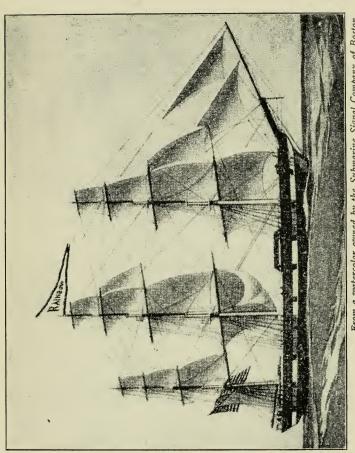
"This whole passage," says Clark, "was most remarkable, as the *Natchez* had established the reputa-

tion of being an uncommonly slow ship."

It is intimated in some of the magazine stories, as said, that Howland & Aspinwall built their second China clipper, the Sea Witch, because of the admirable work of their first clipper, the Rainbow. The truth is they built the Sea Witch because of the marvelous work of Captain Waterman with the Natchez; but they built her to the plans of Griffiths because of the success of the Rainbow. In fact, when the sail plan of the Sea Witch was drawn Griffiths consulted frequently with Captain Waterman. When building the Sea Witch her owners argued that if Captain Waterman could bring the "old flat-floored cotton wagon" home in 78 days he could lower that record by something memorable with the new Griffiths clipper.

And so he did by something most memorable—eventually. The Sea Witch sailed on her first voyage to China on December 23, 1846, and arrived at Hong Kong in 104 days, or twenty more than was required by the Houqua in her first voyage. She sailed from Canton for New York on July 25, 1847, and arrived in 81 days, or three more than had been required by the "old, flat-floored cotton wagon."

However, a day of glory was to come with the



From a watercolor owned by the Submarine Signal Company of Boston, Clipper Ship "Rainbow" of New York.



second voyage. The Sea Witch made the run out to Hong Kong in 105 days and then, on November 7, 1847, sailed for New York on a passage never equaled either before or since. She was expected to lower the record of the Natchez to a memorable extent, and as said she did. She arrived in New York in 77 days. She lowered the record of the "old cotton wagon," in a race 14,000 miles long, by just one day. In two subsequent voyages she came home in 79 and 81 days respectively. She was thus unable to equal the record of the Natchez on these runs.

Of course all four of her passages were marvelous examples of speed but in view of the Natchez's "well-earned reputation of being an uncommonly slow ship" is it unfair to suggest that the ability of Captain Waterman had quite as much to do with the speed record of the Sea Witch as did her model? Moreover, since the Rainbow never equaled the record of the Natchez, is it not manifest that the model of the Rainhow and the Sea Witch had much less influence upon the development of the clippers than modern writers have been disposed to assert?

Because the record of the Natchez has never been equaled by any other Canton trader than the Sea Witch, and because it was surpassed by the run of this extremely sharp ship by only one day, the influence of the shape of a hull upon speed may well have consideration here. What shape of hull is best adapted for speedy passages between ports that are far apart? Griffiths's whole theory of shape was expressed in his description of the *Lightning* (Nautical Magazine, Vol. II, p. 9), already quoted.

"Very great stability; acute extremities; full, short midship body; comparatively small deadrise, and the longest end forward, are points in the excellence of this ship."

By acute extremities he meant the use of hollow water lines and his expression "the longest end forward" indicated that the greatest breadth of beam was placed abaft the midlength section.

Were the hollow water lines as advantageous as Griffiths, Steers and McKay supposed they were? Evidently McKay came to have doubt in the matter because he gave the *Lightning* very deep hollows, but the bows of the *Great Republic*, the pride of his life, "were wedge like, being *slightly* concave below water and *convex* above, with much sameness in shape," to quote the description written by Griffiths in the *Nautical Magazine*.

More important than the views of McKay in this matter, however, is the modern practice in modeling hulls for speed only. The yacht America had hollow waterlines, but the modern defenders of her famous cup, beginning with the Vigilant, have all had what has been called spoon-shaped bows. The hollow waterline was abandoned as a detriment to speed.

As to the location of the greatest breadth of

beam—whether forward or abaft the midlength section—an inspection of the records of the swiftest American ships shows that some "with the longest end forward," like the Lightning, have been exceedingly swift and some like the Liverpool packet Dreadnought, have had "the longest end" aft. The Dreadnought's widest section was three feet forward of the beam; the Lightning's eight feet abaft.

This is not to argue that one model is as good as another. What we need to learn is the features of the clippers which gave them great speed, and but little inquiry is needed to show that the relative dimensions were of much more importance than any

peculiarity of shape.

An examination of the Palmer hulls is interesting in connection with this discussion. The Houqua was 132 feet long by 32 wide and 17 deep. She was a little more than four times as long as she was broad. The Oriental was 185 feet long by 36 broad and 21 deep. She was therefore five times as long as she was broad. When designing the Houqua the captain was venturing into a new field and he was therefore conservative in his model. The relation of length to beam was that found in some older cargo ships. Later experience led him to make his models relatively longer.

An examination of the known proportions of the famous clippers shows that most of them were around five times as long as they were broad. Some were longer. The Flying Cloud and the Lightning

were about five and a half times as long as they were broad, the Sovereign of the Seas was nearly six times, and the Great Republic was more than six times as long as she was broad. The Sea Witch, the Oriental, the Lightning, were swift because, first of all, their dimensions were well proportioned.

In this feature the clipper models were a distinct departure from previous models. Dana's "Seaman's Friend" describes the *Damascus* built at Boston in 1839. She was 4.6 times as long as she was broad. The *Rajah* was of about the same proportions. Two British men-o'-war described were still wider. One was but 3.2 times as long as she was broad and the other 3.13.

A relatively long hull enabled the designer to give his model long wedges at the bow and stern, and every backwoodsman knows that a long wedge is easier to drive than a short one.

It may be noted that the *Houqua* was relatively shallow; she was a "skimming dish!" Her speed was due to this feature, one may suppose, for a shoal depth makes for speed, as the America's cup races have proved.

Undoubtedly the most important feature of the clipper was her sail plan. The masts and yards were relatively enormous. Large sails meant great power, but it was not alone in spreading much canvas to storm winds that the clippers exceeded all other ships. For the lofty spreads of light canvas—skysails and royal studdingsails—caught many a

vagrant breeze and carried the clippers swiftly across the doldrums between trade-winds areas when the ordinary ships lay rolling idly for weeks at a stretch.

The Damascus, mentioned above, was 32 feet wide. Her main yard was 60 feet long-less than twice her width. The Stag Hound was 40 feet wide and carried a main yard 86 feet long. The Great Republic was 53 feet wide and was originally provided with a main yard 120 feet long.

Furthermore the clippers carried sails which were proportioned to the masts in such a way as to give a balance; with all plain sail set the ship would "steer herself," as the sailors used to say. It was because the canvas on the N. B. Palmer was perfectly balanced, fore and aft, that Captain Low was able to take her to her wharf at San Francisco under canvas when the pilot refused to do so.

Perhaps the feature of Captain Palmer's clippers which made the strongest appeal to the owners of the day was their strength. When designing a ship for speed the size of the timbers used in the framing had to be adjusted to suit the strains on the hull. The rock maple keel, the white-oak ribs and the long-leaf pine beams, were all heavy and expensive. The builders were tempted to scamp the size of all these timbers in order to save both weight and money, and many yielded to the temptation. Having been built with scamped timbers some ships designed as clippers were hogged—their backs were broken—when they were launched. The hulls of

others were drawn out of shape by the pressure of the waves when they were driven hard against a gale. The tremendous pressure of the masts on the keel, when a ship was straining under a press of canvas, sometimes drove the keel down until the garboard strake seams were opened, creating leaks which spoiled the cargo and even sank the ship. The pull of the shrouds sometimes drew the bolts which held the lower fittings of the shrouds to the sides of the hull and sometimes opened the seams on the sides. The same strain frequently wrecked the tooslender masts and yards.

The experience of the Houqua during a cyclone which overtook her on the Indian Ocean, soon after midnight on January 16, 1848, shows at least that she was built to endure the worst. The wind was so powerful that within seven hours after it came, all furled as well as all reefed sails had been blown in small bits from the yards and spanker boom. Not a rag was left. The pressure of the wind on the bare jibboom not only broke that spar off in the bowsprit cap, but it carried away the weather cathead to which the jib and flying jib guys were set up. All three topgallant masts followed. At 9 in the forenoon the ship entered the quiet area in the centre of the cyclone and the crew cleared away the wreckage aloft. But at noon the wind came again with such force that it was impossible to stand up on deck and all hands gathered at the main rigging save only the man who was at the wheel. The barometer stood at 27.5.

At 4 P. M. the crew saw an almost solid mass of spoondrift coming with the wind. It was about 30 feet high, and when it struck the ship it formed, for a moment, an arch over the deck beneath which the mainmast was visible though the top was invisible. With that the *Houqua* turned over until her tops were in the water alee and the deck was perpendicular.

Captain Low, who was in command, fell into the sea, but he caught a flying rope and climbed up to the main pin rail. There, by motions, he directed the crew to cut away the main rigging while the man from the wheel, who had escaped to the mizzen rigging, cut the shroud lanyards there. The masts at once went overboard and the ship righted. Meantime, of course, the deck had been swept clean and so much water had poured down the cabin and the forecastle scuttles that the hull was half full.

But when the wind had moderated and the crew had pumped the water out they found the hull as tight and sound as ever, and she sailed 3,500 miles under a jury rig to Hong Kong. It was after this tremendous strain that she made her record passage from Shanghai to New York.

The final test of a design for speed was in the ability of the ship to endure all strains in a storm wind.

Perhaps the influence of size upon speed has not been sufficiently considered in the clipper records. All yacht clubs have rules under which the large yachts give time allowances to small ones, but even with the best of these rules the large yacht has yet an advantage. A race between a seventy-foot challenger for the America's cup and a ninety-foot defender is simply unthinkable. But the record of the Samuel Russell, of 940 tons, is compared with that of the Sovereign of the Seas, measuring 2,421 tons.

Confessedly when the peculiarities of the clippers are considered in the light of present-day knowledge it is manifest that naval architecture was not then an exact science, and it is not an exact science even now. Naval architects make calculations and draw plans for each ship. Then they build a six-foot model which they tow to and fro in a big tank built for the purpose, and measure the strain on the tow line with care. Next they begin to scrape away the underwater body of the model, here and there, to learn what alteration of shape is needed to reduce the strain—to increase the speed, in other words. We are yet designing ships by the rule-o'-thumb.

If the records of the Palmer clippers are considered all together it appears that each led to the building of another because all were profitable; and all became noted, not through the use of any one peculiar feature of build or outfit, but as a result of continuous good work. Every passage was made

at a satisfactory speed and the cargoes were delivered in good order. So long as they were in service it was said of them all, except the Houqua, that they "did not cost the underwriters a cent."

The all-around efficiency of these ships should be emphasized in any story of the clipper era, because something more than a swift passage or two was needed to induce the ship merchants everywhere alongshore to undertake the building of "fast vessels for foreign trade," to use Griffiths's words. Something more was needed, that is to say, to develop the "clipper era." Donald McKay did not get his order to build the Staq Hound (the first clipper built in Boston) until 1850—until four years after the Rainbow had made her second voyage to Canton, and two years after the Sea Witch, "the swiftest clipper of her day," had broken the record of the "old cotton wagen," Natchez. Boston merchants knew all about these records, but they had not been convinced by the short passages that sharpbuilt ships were more desirable than others. Before they would order clippers it was necessary to show them that the sharp-built ships had records for making more money than the ships they already owned. The Palmer ships, built for the conservative firm of A. A. Low & Brothers, were furnishing just such records. They were the most profitable ships in the China trade—that is, they yielded the highest per cent of profit—though the Griffiths ships were only a little behind them; and it was just when these

profits became fully known alongshore that the extraordinary demand for swift ships, to carry cargo to California at \$1.50 per cubic foot of space, arose. The Boston merchants did not order clippers for fear of losing their tea trade, nor to pose as the owners of the swiftest ships in the China trade, but to get a share of a transportation business wherein the freight rate was \$60 per measured ton. They did not intend "to enter the lists with Messrs. Aspinwall, Captain N. B. Palmer, and others, and dispute for the palm of speed." They did not build as a sporting proposition even though thousands of dollars were wagered on the flyers when racing from port to port. The clipper era was developed by men who were animated solely by the motive now so often stigmatized as greed.

Working as contemporaries but not as rivals, Captain Palmer and John Willis Griffiths developed two styles of sharp-built ships, both of which were great money makers. The era of the clipper was originated when Palmer and Griffiths built the Houqua and the Rainbow. The climax was reached when the ships of Donald McKay and of Captain Palmer were earning gross sums in single passages equal to and commonly exceeding the original costs of the vessels. The business depression, which followed the California inflation, reduced the freight rate to \$10 per ton in the New York-San Francisco trade, and bluff models were seen once more in the shipyards.

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Observe, now, that in his description of the Stag Hound, previously quoted, Griffiths wrote as follows:

"The construction of this ship may be said to mark the introduction of the late clipper era at Boston."

The era which was begun by the building of the *Houqua* and the *Rainbow*, 1843-1845, was called "the *late* clipper era" in 1855—it was then passing away. Why it passed—why the splendid ships which had outsailed all others and made a reputation as lasting as the history of the sea—failed at last, shall be told in another chapter.

CHAPTER XX

THE "GREAT REPUBLIC" REBUILT

N interesting little side light on the character of Captain Palmer is found in the list of names given to the ships he designed. The names Houqua, Samuel Russell, Oriental and N. B. Palmer were such as conservative merchants were then in the habit of giving ships. The Boston names of the most famous clippers were Stag Hound, Flying Cloud, Sovereign of the Seas, Chariot of Fame and Great Republic—a somewhat boastful list.

The last named ship was the largest of the clipper fleet, and the largest ship of the sail ever built of wood. She is of special interest here because, through a vagary of fortune common enough in the annals of the sea, she came into the possession of Captain Palmer.

To give the story of this ship the right focus it is necessary to recall first the trade between eastern United States ports and San Francisco, after the discovery (Jan. 24, 1848) of placer gold in California. When the news of this discovery was officially confirmed a vast host of people hastened with all possible speed to the new diggings. The

congestion of people at San Francisco raised the prices of commodities to an extraordinary height. On July 1, 1849, lumber worth \$12 per thousand in New York sold for \$500 in San Francisco. Eggs sold for \$2 a dozen. Fowls were \$4 each and all other commodity prices were comparable with these. The profits on a cargo of general merchandise shipped from New York to San Francisco, at that time, were so great that the demand for swift ships of the largest size exceeded any ever before known in the nation. This demand continued for several years, and sea capitalists built for the trade with all speed. In 1851 a large number of ships were launched which measured from 1,500 to 1,800 tons, or an average of 500 tons larger than the large ships of previous years. A year later several ships measuring above 2,000 tons were built with profit for the owners, the largest of these, the Sovereign of the Seas, measuring 2,421 tons. This ship was built by Donald McKay of Boston on his own account, because no one was to be found who would invest in a vessel as large as she was. McKay's friends seriously warned him that bankruptcy would follow, but when she was put in commission she proved to be the most profitable ship of the whole clipper fleet of the day.

It was the success of the Sovereign of the Seas along with the prevailing optimism in business circles—especially the prevailing optimism—that led, in 1853, to the building of the Great Republic.

If certain characteristics of this ship be considered it is seen that her name was appropriate; for she was in several respects like the American nation. First of all, she was thoroughly well framed and put together. Her backbone—the assemblage of timbers at her keel—was nine feet, ten inches deep, from the top of the riding keelson to the bottom of the shoe, and the breadth of this assemblage was commensurate with the depth. She had bilge keelsons which were larger than the keels of many big clippers. The scarfs of the timbers were long, the coags big and numerous, the bolts, whether of copper or iron, were of unusual dimensions. Finally the frames were diagonally cross-braced with iron straps four inches wide and an inch thick. In her construction she was as far superior to all sailing ships of that day as the fundamentals of the American nation were superior to those of all other nations.

Then, while some critics, including Designer Griffiths, thought she lacked beauty, they all agreed that she was built for speed and carrying capacity. Her spread of canvas was in fact simply enormous, and in proportion far beyond the usual spread. Thus her main yard was 120 feet long to a breadth of hull of 53 feet, or 14 feet more than the naval rule allowed in making the sail plan of swift frigates.

Her bulk was especially comparable with that of the nation. She was 325 feet long on the upper deck, and that was 125 feet longer than the deck of the clipper *Aurora*, a vessel of the average size in the trade during 1854. She measured 4,555 tons, and her capacity was 6,000 tons. She was of such immense size that neither owners nor agents could fill her; and a fanciful writer has compared the vast empty space in her hull to the wide vacant land spaces then existing in the nation. There was something of the "spread-eagle" in the attitude of her designer, as there was in the attitude of all good Yankees in those days.

When completed the Great Republic was brought to New York and partly loaded for Liverpool, where she was to be put into the trade to Australia. But just before she was ready to sail (December 26, 1853) a fire which originated in a nearby warehouse set her on fire aloft, for that was the day of tarred rigging. The firemen flinched when asked to save her, her spars and upper deck were destroyed, and she was sunk at the pier. She was then abandoned to the underwriters (she had been insured for \$400,000), and the underwriters in due course sold her at auction, "as is and where is." Captain Palmer bought her, as she lay on the bottom beside the pier, for A. A. Low & Brothers. To show his standing with this firm it may be told that none of the members knew what he was doing until he went to the office and announced the purchase. Mr. A. A. Low at once confirmed the transaction. The captain took a sixteenth interest in the hulk.

Of course the captain had bid her in at a low price. She was raised and towed to the shipyard

of Sneeden & Whitlock, Greenpoint, where she was rebuilt as a razee, to use the naval term. She was rebuilt, without her original upper deck, at a total cost of \$27,000.

The original figurehead, by the way, was a beautifully-carved head of an eagle, covered with gold leaf. Captain Palmer saved it and took it to Stonington, where it may now be seen in the public library. The razee had no figurehead.

In her new form the *Great Republic* was still much larger than any ship of the sail afloat, for she measured 3,355 tons and had a capacity of something more than 4,000 tons.

Reducing the depth of hold was only one of the alterations made in the *Great Republic*. Thus the new main yard was only 90 feet long as compared with the original, 120 feet long, a reduction of 25%. The masts were also shortened, of course. This was done to reduce the number of men required.

A novelty in the outfit of the big ship was a steam engine installed on deck and connected with handy winches, fore and aft. American shipbuilders had led the world theretofore in adopting such laborsaving devices as blocks with roller bearings, improved windlasses and "patent" steering gear, but the use of steam to save human muscle was an improvement in advance of the day. The practical result of all the changes made by Captain Palmer in this rebuilt ship was a reduction in the number of men required from 100 to 50.

On February 21, 1855, Captain Palmer sent the Great Republic to sea, bound for London, with 3,000 tons of guano in her hold "for ballast." She ran to the coast of England in twelve days, and Admiral Preble, in his interesting account of this vessel, printed in the United States Service Magazine, recalls the fact that she sailed 412 miles in 24 consecutive hours while on the way. If she was able to sail at that speed under a main yard 90 feet long, what might she have done if equally well handled under her original main yard 120 feet long?

The ship was consigned to the London firm of W. S. Lindsay & Co., shipbrokers and merchants of the highest standing, the head of the firm being the historian whose work has been quoted herein. Referring to her (Vol. III, p. 359), Lindsay wrote:

"She made the passage to Scilly Islands in thirteen days, beating up the channel thence in three days to the Downs. But on her arrival in London... I found her much too large to be employed profitably in any of the ordinary channels of commerce; and had not the French Government, then in want of transports for the Crimean War, been induced by the large space she afforded for the conveyance of troops, to engage her for this purpose, she must have remained, long after her arrival, unemployed."

Lindsay & Co. wrote so discouragingly about the employment of the big ship that the owners sent

Captain Palmer to London to see what he could do with her. Just how he managed the business is not now a matter of record, but the Nautical Magazine (Vol. II, p. 569) reported that the French Government had chartered her for use as a transport (as Lindsay also notes), to carry soldiers and supplies from French ports to the Crimea, where war prevailed. The price received by the owners was twenty shillings net per ton register per month. For his part of the task of securing this profitable charter the Lows gave Captain Palmer \$2,500.

In 1857 the Great Republic was sent from New York to San Francisco with a cargo that yielded, according to one report, a freight of \$160,000. It was in her passage to the west that she made the record run between Sandy Hook and the Equator—16 days. She arrived at San Francisco in 92 days. As was noted at the time, she never had the luck to find a driving gale that lasted for any great length of time. Lieut. M. F. Maury, of the Washington Naval Observatory, whose wind charts were of such great value to seamen, said that if this ship had been able to sail over a route in the far south where the strong winds found by the Sovereign of the Seas prevail, she would have exceeded all records, even with her reduced sail area.

During the Civil War she was in the employ of the Federal Government. In 1869 she was sold in Liverpool and Clark notes that she foundered "off Bermuda" in 1872.

CHAPTER XXI

HAIL AND FAREWELL

s designed, the Great Republic was the most splendid wooden merchant ship ever built, even though too large for profit at that period. That an eager ambition to excel—that pride founded on previous achievement and buoyant optimism—should have produced such a ship was natural and perhaps inevitable. But if rightly seen the result was worth the cost. The patriot's blood is stirred as he reads the description of her huge hull, her extraordinary framing, and, above all, her tremendous spread of canvas; and he is glad that the enthusiasm needed for the production of a ship like her was found in an American builder.

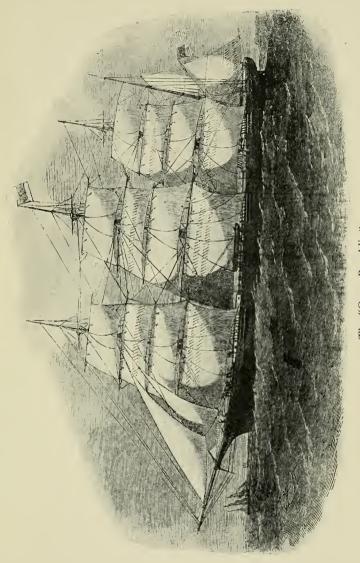
It is interesting to observe, too, that the conservative Captain Palmer had the optimism to invest in this last and greatest ship of her class. He saw clearly that, as designed, she was much too large for the going cargoes, for he was careful, when rebuilding her, to provide for a great reduction in the number of her crew. When he substituted a 90-foot main yard for one that had been 120 feet long, he calculated that while the ship would carry almost as much cargo as any two of the ordinary

clippers afloat she would require few more men in her crew than one of them. There was a solid foundation for his optimism.

One can believe, too, that when he was rebuilding her he was animated by an unexpressed ambition. It would be a notable achievement to make a profitable ship out of this magnificent monster. Perhaps, too, as he recalled his work in creating the first of the clippers, he dimly realized that the *Great Republic* was the culminant, the predominant ship of the famous fleet, and that this feeling moved him to buy her at the auction. At any rate he was, in later years, honestly proud of having been a leader among clipper owners at the end, as well as at the beginning, of the wonderful era.

In connection with the story of the Great Republic it is interesting to recall the fact that the English were also building a ship, in those days, which was much too large for the available traffic—the steamship Great Eastern—the keel of which was laid on May I, 1854. She and the Great Republic were contemporary exhibits of excessive optimism, but the British ship occupies a position in the history of the sea far different from that of the big clipper. For she was a sporadic growth in the evolution of a new and more efficient type where the American ship was a final specimen of a type doomed to disappear.

The fact that the ship of the sail was to be replaced in all trades by a new type is a matter of especial interest here, because of Captain Palmer's



The "Great Republic."



connection with the contest between the two types. Accordingly, a brief consideration of the evolution of the deep-water steamship must be given. In 1838 I. K. Brunel, chief engineer of the Great Western Railroad, in England, sent the steamship Great Western from Bristol to New York (April 7-23), and demonstrated that a steamship could earn a profit in the transatlantic trade; for this voyage yielded a profit and the ship continued to make profitable voyages for years thereafter in spite of the opposition of another British line which received a substantial subsidy for carrying the mails.

It is important to observe next that the early steamships were run in opposition to our packets and not to our clippers. The clippers were in the long-haul trade and made their whole magnificent career after the steamships had begun their contest for supremacy in the North Atlantic. The Houqua was launched nearly six years after the first voyage of the Great Western steamship was made.

Note further that the steamships served the American packet ships precisely as the packets had served the preceding ships—they provided a more regular and dependable service. The American packets for a time made contracts with shippers by which they agreed to deliver cargo in Liverpool ahead of the steamships, under a penalty of a great reduction in the freight rate, but they could not make a similar contract for the passage to New York and succeed. The steamships could and did

announce in advance the days on which they would depart and those on which they would arrive, whether east bound or west bound, and they made good the promise. So they rapidly secured the high-class freights and the passenger traffic.

Efficiency won the contest and that is a statement which American ship owners need to keep in mind.

When American ship owners saw the trend of the business, they sought to go into steam, but they failed for several substantial reasons. The British had had long experience in navigating the stormy waters of Europe with steamships. They had a well-developed iron business where America had none. The iron as well as the copper bolts with which the famous Yankee clippers were fastened, were imported; and when the Yankee built steamships he imported much of the iron work. Then, too, the Yankee was handicapped by the success he had had in building inland-water steamers, for he tried to use the kind of engines which had succeeded on the inland vessel, but found them unadapted for deep water.

Worst of all, the Yankee continued to use wood for the hull while the British turned to iron, and he used paddle wheels while the British adopted the screw propeller. The critical period of the contest between American and British shipping on the North Atlantic came in 1850, when a line of iron packets, driven by the screw propeller, was established between Philadelphia and Liverpool. From the build-

ing of Palmer's packet ship Roscius to the rebuilding of the Great Republic there was absolutely no development, or say, no evolution in the ship of the sail. But the substitution of the screw for the paddle wheel, meantime, was a development amounting to a revolution; and in the meantime, too, each new steamship carried minor improvements in many features. The art of building ships of the sail had culminated; the art of building steamships was in its infancy; and yet these infant-class steamships were more efficient than any ship of the sail in the Liverpool trade. The clipper era came after the superior efficiency of steam on the North Atlantic had been demonstrated; and with the further evolution of steam the proud and beautiful ship of the sail was speedily driven from all trades.

The attitude of American ship designers and capitalists, among whom Captain Palmer was a leader, is very well set forth in the periodicals of the day. In the *Nautical Magazine* of August, 1857, the editor considered the question, "Which is the Best Material for Ship Building—Wood or

Iron?" He wrote:

"Those who have tested both wood and iron know wood to be the best. . . . The English shipbuilding iron is unfit for building vessels. We know this from personal experience. . . . In reference to the security of the shaft in the sternpost, we do not hesitate to say . . . that we can furnish greater security

. . . in a wooden vessel than our transatlantic friends can in an iron vessel as now built."

In the editor's view the current talk about the superiority of iron was heard only because "English influence is endeavoring to destroy the value of our forests and to increase the value of her mines."

In "A Cyclopedia of Commerce," issued by Harper & Brother in 1858, is the following on page 1706:

"It is probable that in the end" the steamships "will engross the greater part of the coasting trade of most countries and of the trade between countries adjacent to each other. But the improved class of sailing ships have little to fear from the competition of steamers in the more distant branches of trade."

In short, American shipping people could not see the trend of sea transportation.

Captain Palmer's opinion of iron as a material for shipbuilding has been preserved in a record at Stonington, as follows:

"When he was in Liverpool with the Siddons the English shipbuilders were discussing iron ships, and Captain Nat laughed at them. He looked at the iron plate and said he could fire a musket ball through it; that with an old gun he had he could sink any of their iron ships. A wager was instantly made that he could not make his words good. The

iron plate was put in position and with an old musket he fired a ball through it."

It was commonly believed in America that iron was unfit for shipbuilding because it was thus easily punctured. It was frequently said that if any accident happened to an iron ship at sea she would drop from under the feet of the crew while they were crossing the deck to the lifeboats. The fact that the iron ship *Great Britain* had remained on the rocks on the coast of Ireland, all one winter, and was then hauled off and fully repaired at small expense, was ignored.

The fact that Captain Palmer and others looked on without concern while the British were developing their iron shipping seems, at first thought, astonishing and even astounding. But when this apathy is well considered it is understandable. It was due to the bent of mind naturally developed in the sailor of the sail. For the man who had designed, built, and launched such ships as the *Houqua* and the Samuel Russell, and had then driven them by fair winds and through foul gales to record achievements, could look upon the slobbering, crashing, stinking steamship with no other feeling than disgust. The sailor of the sail was in his every fiber and instinct an artist.

Nevertheless, Captain Palmer did try his hand at it. He bought an interest in one built for the Black Ball Line and took command of her on her first voyage. He tried thus to adapt himself to the new system of transportation, but one trial was enough. On his return to New York he left the ship and soon after retired from active work at sea altogether.

With the rebuilding of the Great Republic the story of Captain Nathaniel Brown Palmer, in his work of giving American shipping a dominating influence on all seas, comes to an end. Nevertheless, a few brief sketches-pictures-of his life in retirement should prove of interest. He was one of the able seamen who established the New York Yacht Club, and while he lived he was active in promoting its interests. That he had an inborn love for sailing in small boats as well as merchant ships was shown during his second voyage to Canton in the Houqua, when his wife and a niece were with him. For he rigged one of the quarter boats with sails and then took his wife and niece, and any guest that happened to come to the ship, for all-day exploring expeditions around the river, above and below Whampoa. Having given the best years of his business career to designing swift ships of the sail, he found no more congenial work for his hours of leisure than the designing, building and sailing of pleasure ships. It is remembered that he thus produced seventeen different vachts. The famous schooner vacht Palmer was named for him.

When sailing his yachts, whether in the races of the New York Yacht Club or in cruising along shore, he always carried a few of the boys of Stonington. Some who were thus favored recall now that he not only taught them the arts of handling canvas, but he provided for them experiences which cultivated such mental qualities as energy, endurance and persistence.

Thus, it is related that when he sailed from Stonington for Saybrook, one day, with such a crew on board, the wind sagged just as he was entering the river, and the tide began to ebb. The yacht lost headway and then began to drift. Thereupon the boys were put in a yawl, with a line to the yacht, in order to tow her in; and they were kept towing until they succeeded, although it took them nearly all night to do it. They thought they were "in hard luck" at the time, but later they were thankful for a lesson in persistence—as a record shows.

All outdoor sports appealed to the captain, and he was especially fond of shooting. Having provided his crew with wild fowl among the islands on the Antarctic coast, he renewed his youth by shooting coots on Long Island Sound and ducks and geese on the Currituck Sound. For he was an active member of the Currituck Club, a famous organization of sportsmen in his day.

Hale and hearty, gentle and kindly, and with an optimistic outlook on life which was founded upon a sincere faith in the Christian religion as taught by the Episcopal creed, he grew old slowly. Nothing ever deeply marred his life until he lost his wife in 1872, but he died at last of a broken heart. After the death of his wife he became devoted to a

nephew, who had been named for him, the son of his brother Alexander. The boy became afflicted with tuberculosis and the captain made every possible effort to save him. He and the boy traveled far in search of a climate where a cure might be effected, but all in vain.

The last journey made was to China. When it was finally seen that no hope remained, the two went on board the City of Pekin, an American ship, at Hong Kong, May 15, 1877, hoping to reach home while the boy was yet alive. Though 78 years old, and worn with travel and worry, the captain was yet every inch a Viking lord of the sea. Captain Tanner, the ship's master, said later that he always felt as if he were a junior officer when in the dominating presence of the old clipper sailor. But the final and breaking strain of life was at hand, for the boy died when one day out from port—May 16.

Throughout the voyage to San Francisco, thereafter, the captain failed steadily though not visibly, for his will sustained him. On reaching port he wired the death of the boy to the father. Then he went to bed at his hotel and on June 21 he passed away, unafraid, to the haven of all who leave a record of good work well done.

On July 15, with his coffin buried under great masses of flowers, his body was carried by a memorable host of his friends to the family plot in the cemetery overlooking the sea at Stonington, and there it rests awaiting the Master's call.











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